

The CONSTRUCTOR

OFFICIAL PUBLICATION OF THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA



Volume XXXVI

APRIL 1954

Number 4

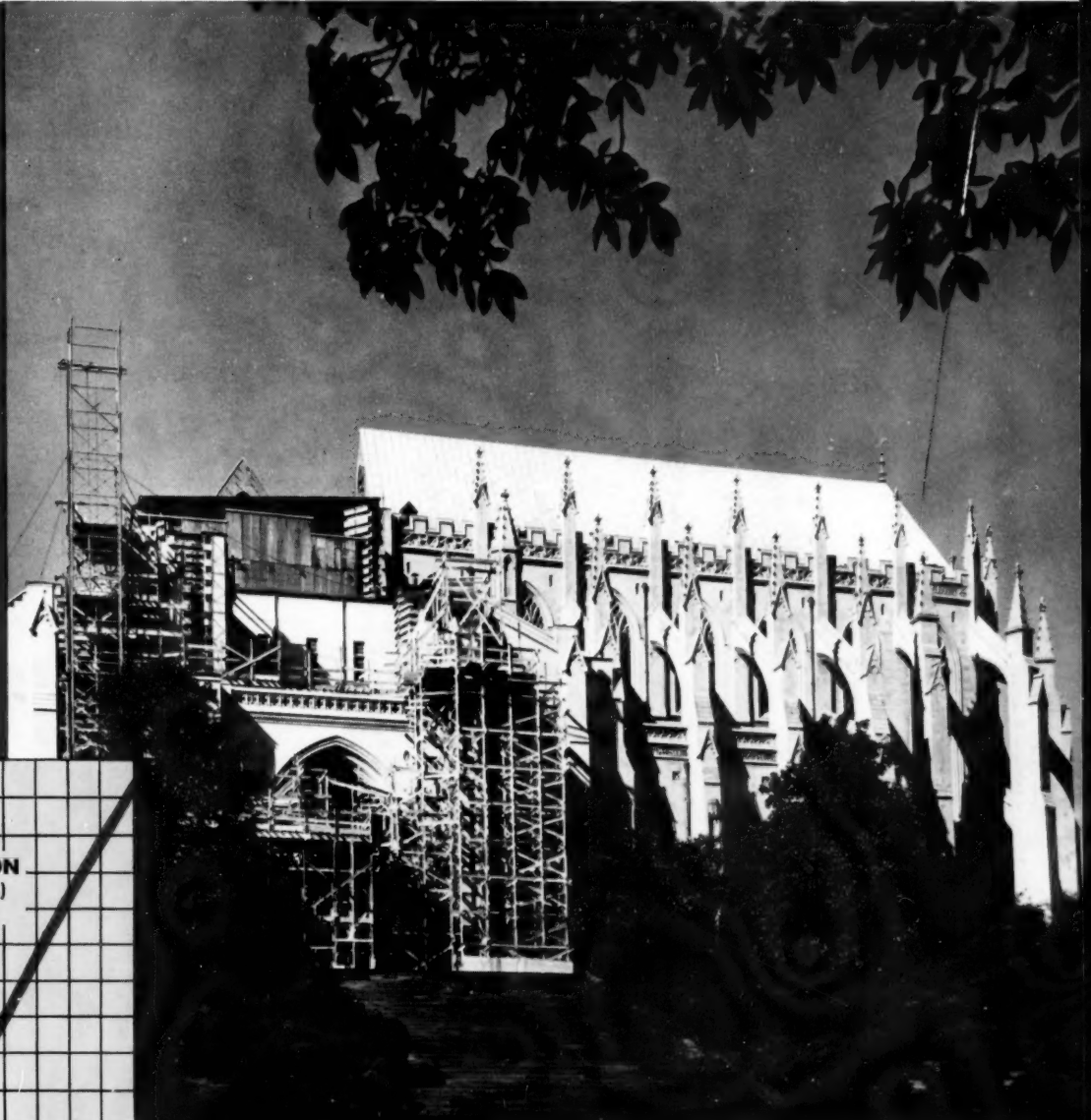
BUILDINGS

HIGHWAYS

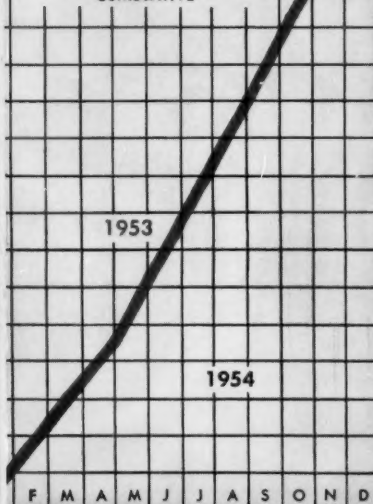
AIRPORTS

RAILROADS

PUBLIC WORKS

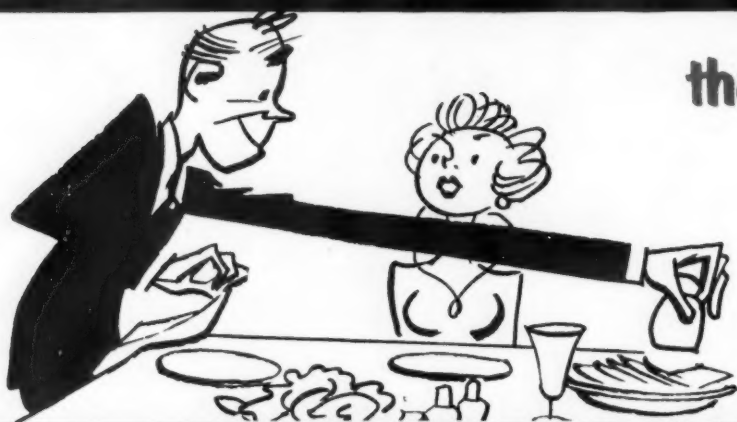


NEW CONSTRUCTION
(Billions of Dollars)
CUMULATIVE



Construction Continues Dynamic Role—7

Optimism Keynotes A.G.C. Convention—30



the crane with the **BOARDING HOUSE REACH**

AUSTIN-WESTERN HYDRAULIC CRANE

with telescopic boom



It's the LIVE BOOM that puts the A-W Hydraulic Crane out front in the performance parade . . . live power with instant response for all boom movements . . . extending and retracting, raising and lowering, and rotating. Fingertip hydraulic control places the load exactly where it is wanted; handles delicate spotting jobs with superb precision.

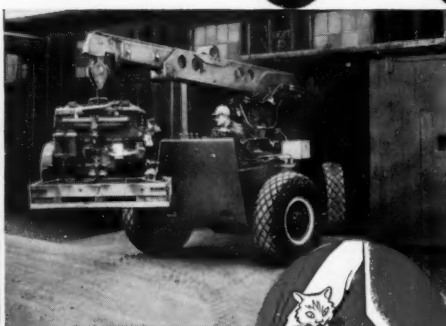
No other mobile crane has a boom so completely "alive" . . . no other outdoor-indoor crane will handle so many jobs, so well.

**SEE
what it does -**



Reaches Far, High

... changes boom length and boom angle quickly and easily while under load.



Raises and Lowers

... picks up maximum loads, and transports them through low-clearance doors.



Rotates 360°

... simplifies and speeds up many operations, especially when working in close quarters.



AUSTIN-WESTERN COMPANY

Construction Equipment Division • Baldwin-Lima-Hamilton Corporation

AURORA, ILLINOIS, U. S. A.

Power Graders • Motor Sweepers • Road Rollers • Hydraulic Cranes

AUSTIN-WESTERN COMPANY, 618 Farnsworth Avenue, Aurora, Illinois
Please send complete information and literature on the Austin-Western Hydraulic Crane.

Name

Title

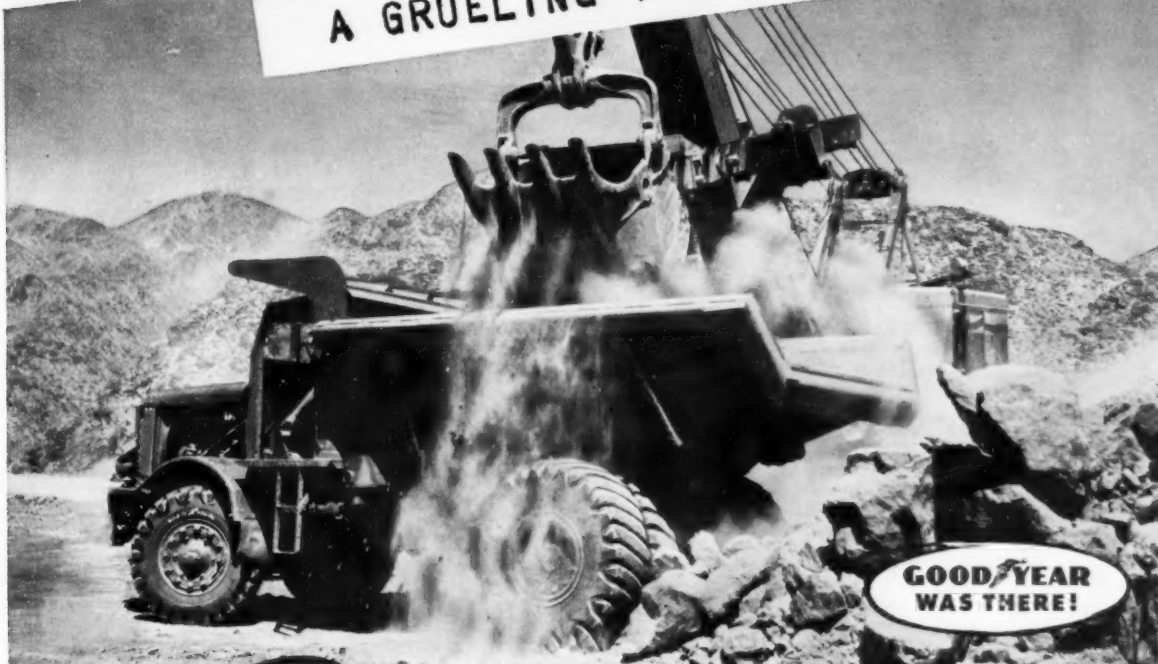
Company

Street

City Zone State

Other products: Power Graders, Motor Sweepers, Road Rollers

HEAVY LOADS, JAGGED ORE AT KAISER MINE---
A GRUELING TEST FOR TIRES!



Road Lug—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

HARD ROCK LUG
for stamina and full
pull, forward or
reverse, on all kinds
of tire-killing work.

HARD ROCK RIB
for front wheels on
all tire-killing serv-
ice. Rugged—smooth-
rolling — easy-
steering.

ROAD LUG
for toughness and
super-traction OFF
the road and long,
smooth mileage ON
the road.



The Kaiser iron mine at Eagle Mountain, California, produces ore that averages 53.5 per cent iron. Such rich ore is extremely heavy and, under such tremendous dead weights, a pothole or chunk of fallen ore can be a tire-killer.

THOSE are reasons why "GOODYEAR WAS THERE"—why Goodyear is *still* there—with tires designed by the greatest tire-building experience on earth—with Goodyear's new Triple-Tempered (3-T) Cord that controls tire-growth, cuts tread and body failures to new LOW lows. Such tires can take it, day after day after day—and still deliver the kind of day's work that keeps jobs out of the red.

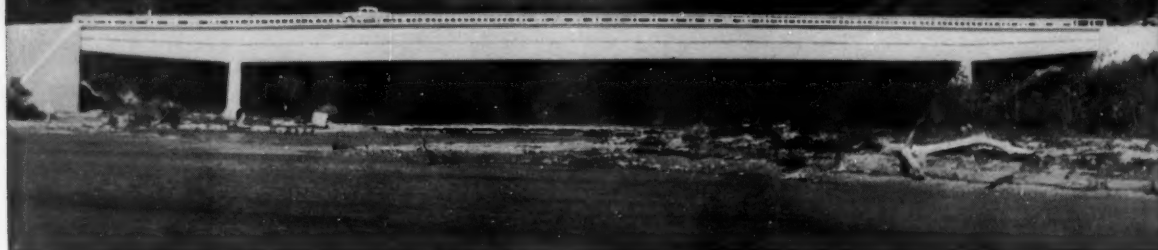
That's why Goodyears are so often "there" on the jobs that make history—and money. They're specified by the men who know their tire costs per cubic yard! Goodyear, Truck Tire Dept., Akron 16, Ohio.

FOR EACH JOB, THERE'S A COST-CUTTING GOODYEAR TIRE!

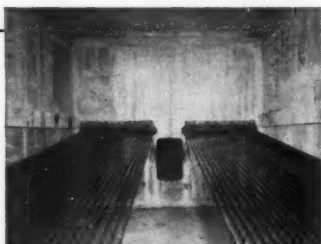
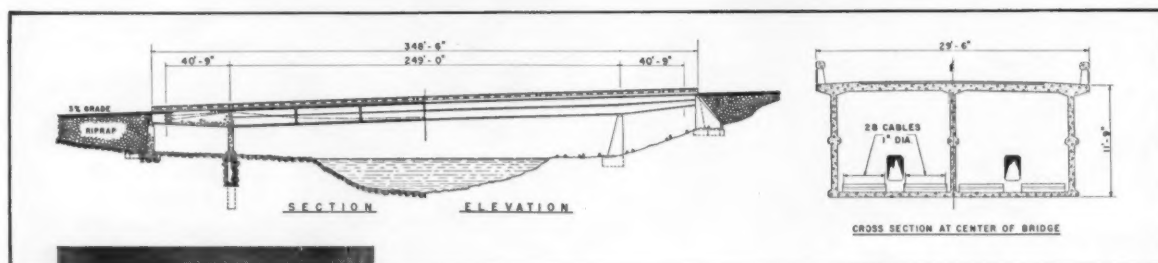
GOOD YEAR

MORE TONS ARE HAULED ON GOODYEAR
TRUCK TIRES THAN ON ANY OTHER KIND

STRESSING PROGRESS IN BRIDGE DESIGN



**Cuba's Cañas River Bridge Features Prestressed Reinforced Concrete
Two-cell Box Girder, with 249-ft. Clear Span**



● For low maintenance costs, concrete was selected for this bridge over the Cañas River, on the highway along Cuba's south coast between Trinidad and Cienfuegos. For utmost economy, the Republic of Cuba selected post-tensioned concrete.

This new bridge is said to be the longest clear-span, prestressed, reinforced concrete bridge in the Americas, and third longest span of its type in the world. The center span, 249' in length, is of two-cell, hollow-girder construction. Width overall is 29'6", and each cell is 11'9" x 13'5". The structure carries a 19'8" roadway and two sidewalks, each 4'11" wide.

Each hollow-box girder is post-tensioned against solid concrete an-

chorages 40'9" long, by means of 28 one-inch cables. The load is transmitted through steel bearing plates, with take-up bolts which are accessible through inspection chambers in the end spans.

Soundness of the prestressed design and its practicability from a construction standpoint are evidenced by this slim, graceful structure which bespeaks quality in every line.

CAÑAS RIVER BRIDGE
on Trinidad-Cienfuegos Highway, Cuba

Designed by
STRUCTURAL SECTION,
COMISIÓN DE FOMENTO NACIONAL;
ING. LUIS SAENZ, Chief Engineer

Contractor: **CIA CONSTRUCTORA AEDES**



LONE STAR CEMENTS COVER
THE ENTIRE CONSTRUCTION FIELD

LONE STAR CEMENT CORPORATION

Offices: ABILENE, TEX. • ALBANY, N. Y. • BETHLEHEM, PA. • BIRMINGHAM
BOSTON • CHICAGO • DALLAS • HOUSTON • INDIANAPOLIS
KANSAS CITY, MO. • NEW ORLEANS • NEW YORK • NORFOLK
PHILADELPHIA • RICHMOND • ST. LOUIS • WASHINGTON, D. C.
LONE STAR CEMENT, WITH ITS SUBSIDIARIES, IS ONE OF THE WORLD'S LARGEST
CEMENT PRODUCERS: 18 MODERN MILLS, 136,000,000 SACKS ANNUAL CAPACITY

The CONSTRUCTOR

CONTENTS

BUILDINGS • HIGHWAYS • AIRPORTS



RAILROADS • PUBLIC WORKS

LEGISLATION

Construction Continues Dynamic Role in Economy.....	7
Senate Action Expected on Highway Bill.....	9
Rules Committee Tables Subcontractor Bill.....	11
A.G.C. Opposes Relaxing Ban on Secondary Boycott.....	11
Judicial Review Bill Due for House Action.....	11

NATIONAL ASSOCIATION

A.G.C. Takes Aggressive Actions at 35th Convention..	30
C. P. Street Cites Increasing A.G.C. Responsibilities..	34
Resolutions Adopted at the Convention.....	36
1954 Officers of Association Installed.....	38
MacLeod Pledges "The Best I Have".....	42
Committee Work Sparks A.G.C. Actions.....	43
Committee Chairmen Named for 1954.....	44
Hosts' Convention Arrangements Receive Praise.....	46

GENERAL

New Frontiers Hold Vast Construction Potential.....	50
---	----

NATIONAL DEFENSE

Contractor and The Contracting Officer.....	Rear Adm. J. R. Perry 54
Chorpening Asks Resources Development.....	55

ECONOMICS

Business Year Second Only to 1953 Forecast.....	59
Banker Sees Healthy Readjustment.....	61
Labor Leader Predicts Big Year for Construction.....	64

LABOR RELATIONS

Mitchell Pledges Fair Davis-Bacon Rulings.....	Secretary of Labor James P. Mitchell 69
Labor Relations Stand Taken.....	70
Supreme Court Interprets Davis-Bacon Act.....	72

HEAVY • RAILROAD

Heavy Contractors Discuss Public Works.....	75
Municipal Problems Aired by A.G.C.-A.P.W.A. Unit...	76
Reclamation Anxious to Start Many Projects.....	78

HIGHWAYS • AIRPORTS

Highway, Airport Problems Studied by Division.....	82
Joint Committee Stresses Airport Needs.....	84
Inform Public of Road Costs, A.A.S.H.O. Head Says...	86

BUILDING

Builders Back A.G.C. Stand on Subcontractors.....	89
---	----

APPRENTICE TRAINING

Expanding Construction Volume Requires Apprentices..	93
--	----

PUBLIC RELATIONS

"Sound" Public Relations Program Continued.....	95
Kansas Builders Forum Idea Wins Award.....	95
Press Gives Balanced Coverage to Convention.....	97

EQUIPMENT

Stable Equipment Situation Seen in 1954.....	99
A.E.D.-A.G.C. Drive for Local Units Gaining.....	99

ACCIDENT PREVENTION

Increase Reported in Safety Activities.....	103
Enforcing Safety Practices on Road Construction Work.....	Ray H. Hahn 106

CHAPTERS • BRANCHES

Current Chapter Problems Studied by Secretaries, Managers.....	109
C. P. Street Becomes Kentucky Colonel.....	110
Nebraska Groups Hold Conventions Jointly.....	111
Safer Roads Planned, Missouri A.G.C. Told.....	112
Wilson, Tellepsen Head Local Chambers of Commerce..	114
Kansas Builders Review 1953 Labor Problems.....	116

ALSO IN THIS ISSUE

News of the Month.....	5
Constructographs.....	13, 17, 19
Consumers' Price Index.....	21
Sidelights for Contractors.....	John C. Hayes 23
Editorials.....	25
New Equipment and Materials.....	119
A.G.C. Forms and Reports.....	125
Advertisers' Products.....	126
Index of Advertisers.....	131

EXECUTIVE DEPARTMENT

H. E. FOREMAN Editor	J. D. MARSHALL Executive Editor
JOHN C. HAYES Legal Counsel	JOHN B. SWEM Assistant Treasurer

BOARD OF DIRECTORS

GEORGE B. WALBRIDGE President	WILLIAM MUIRHEAD Secretary-Treasurer
H. E. FOREMAN Vice-President	G. W. MAXON Director
	B. L. KNOWLES Director

EDITORIAL DEPARTMENT

WILLIAM E. WOODRUFF, Managing Editor
WILLIAM G. DOOLY, JR., News Editor



BUSINESS DEPARTMENT

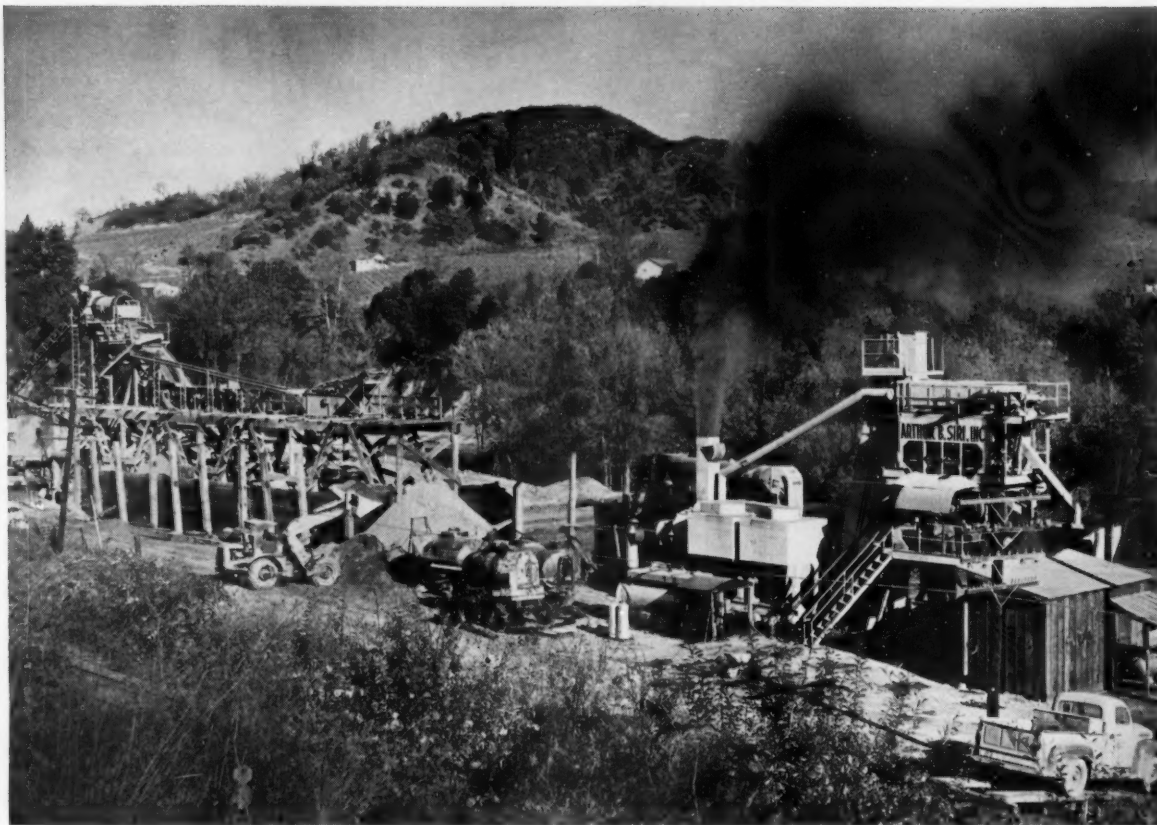
M. S. BECK Business Manager	GENEVIEVE MORRIS Assistant
--------------------------------	-------------------------------

COVER

Washington National Cathedral in the nation's capital continues to take shape. Select buff Indiana limestone is set on that portion of the South Transept which will be directly below the Great Rose Window. The stone is being placed on both the exterior and interior at that level. The arches of the triple tracery windows below the Rose Window have already been set. Work has progressed almost up to a balustrade which will be below the Rose Window. A contract to resume construction of the nave has just been let to the contractor, George A. Fuller Co., A.G.C. The architect is Philip Hubert Frohman, A.I.A., of Washington, D. C.

The Official Publication of The Associated General Contractors of America, Inc.

Published monthly. Editorial and Executive Office, Munsey Building, Washington 4, D. C. Subscription price \$5.00 per year, 40¢ per copy (July \$2.00). Re-entered as second class matter June 10, 1949, at the Postoffice at Washington, D. C., under the Act of March 4, 1879. Copyright 1954 by The Constructor, Inc.



Plant of Arthur B. Siri, Inc., near Ukiah, Calif.

JOB-ENGINEERED FINANCE PLANS

Leading contractor Arthur B. Siri's plant near Ukiah, California, can produce daily 1,000 tons of asphalt plant mix or washed gravel. His job scope: street and highway construction, excavating and underground construction.

This company's ever-expanding range of operations requires sound financing. For this reason, Arthur B. Siri, Inc., has repeatedly called on C.I.T. Corporation for capital loans

and finance plans for purchase of new equipment. Mr. Siri tells us that "C.I.T. finance plans are adjusted so that new equipment can help pay for itself."

Whether you want a capital loan or money to purchase equipment, C.I.T. Corporation has plans designed to meet your needs. Call one of the offices listed below for fast assistance and expert guidance.

C.I.T. CORPORATION

MACHINERY AND EQUIPMENT FINANCING

NEW YORK • CHICAGO • CLEVELAND • ATLANTA • MEMPHIS
PHILADELPHIA • SAN FRANCISCO • PORTLAND • LOS ANGELES • HOUSTON



Biggest news in construction was generated by 35th annual A.G.C. convention in Los Angeles, on which full coverage is presented in this issue. More than 1,800 registered for largest A.G.C. conclave in history, representing leading general contractors from throughout the country and Alaska. An outstanding program was arranged by Southern California Chapter and other California chapters which were cosponsors. (Page 29 and succeeding pages)

John MacLeod, Macco Corp., Paramount, Calif., and George C. Koss, Koss Construction Co., Des Moines, Iowa, were installed as 1954 A.G.C. president and vice president, respectively. Mr. MacLeod succeeds C. P. Street, McDevitt & Street Co., Charlotte, N. C. Re-elected as secretary-treasurer was William Muirhead, William Muirhead Construction Co., Durham, N. C.

Spirit of optimism was dominant tone at convention as forward-looking actions were taken in the interests of the industry and the public. Major resolutions deal with contract method, advance planning of public works projects, subcontractor relations, labor-management relations, highway and airport financing, and accelerated depreciation. (Page 36)

Keynote address by U. S. Steel Corp. President Clifford F. Hood outlines new frontiers shaping up for the American economy, involving vast potentialities for the construction industry, which currently presents the "brightest picture" in the economic outlook for 1954. (Page 50)

A good year in 1954, probably the second best in history, was predicted by three leaders from government, labor and business in a symposium on the outlook for future markets (page 59). They were Carl F. Oechsle, Assistant Secretary of Commerce; Robert L. Gordon, vice president, Bank of America; and Richard J. Gray, president, Building and Construction Trades Department, A. F. of L.

Davis-Bacon Act administration will be handled impartially and fairly, with rates actually prevailing in an area for the type work involved as "the cardinal principle," Secretary of Labor James P. Mitchell told convention. In an address presented on sound film, the Cabinet official also pre-

dicted a banner construction year, and a rise to new heights of prosperity after a static period of a few months. (Page 69)

Praise for contractors' part in peace and war was extended by armed forces, represented by Admiral J. R. Perry, Chief of the Navy's Bureau of Yards & Docks, and General C. H. Chorpene, Army Assistant Chief of Engineers for Civil Works. Sound basis of contractor-contracting officer relationships was set forth. (Pages 54-55)

Reclamation Bureau would like to get "a great many" projects started, Commissioner Wilbur A. Dexheimer told contractors, describing the benefits that would result from Upper Colorado Project. Bureau is conducting 99 per cent of its work by contract method. (Page 78)

Solution to highway problem lies in adequately educating public in how much it costs to build an adequate system, A.A.S.H.O. President A. E. Johnson asserts, in describing deficiencies and outlining proposed legislation before Congress. (Page 86)

Adequate airport financing was urged by Joint Cooperative Committee of A.G.C. and National Association of State Aviation Officials, which enumerated benefits to national economy and defense of completing unfinished projects and undertaking many needed improvements. (Page 84)

Municipal construction problems were aired at meeting of Joint Cooperative Committee of A.G.C. and American Public Works Association, where A.P.W.A. President Milton Offner urged contractors to take aggressive community action in seeking adequate financing of projects. (Page 76)

Equipment and parts are in easy supply and prices should remain at close to current level this year, Joint Cooperative Committee of A.G.C. and Construction Industry Manufacturers Association reports. A.G.C.-Associated Equipment Distributors committee emphasizes formation of local joint groups. (Page 99)

Safety promotion interest is accelerating in A.G.C., with a 54 per cent increase in participating members, committee reports. Many awards were presented at convention, and more than

300 firms reported no lost-time accidents. (Page 103)

Supreme Court issues first decision interpreting Davis-Bacon Act, overruling Court of Claims award to contractor of excessive wages paid. One effect is to overrule former actions by Labor Department in specifying rates higher than those prevailing on basis that they were needed to properly man the project. (Page 72)

Construction continues its dynamic role of bolstering the national economy as record activity and contract awards are reported. January awards were "surprisingly strong" and February awards smashed several records. Private activity in first two months was 5 per cent higher than in same period of 1953. (Page 7)

Proposals for government's role in preventing business and employment contraction were made by Congressional Joint Committee on the Economic Report on conclusion of its hearings, and by Committee for Economic Development. Congressional Committee was in general agreement with President's report. CED based its report on long-range needs. (Page 7)

Judicial review bill, S. 24, was reported out favorably to the House, and action is expected this month when measure, already passed by Senate, comes up on the consent calendar. (Page 11)

Subcontractor bill, H. R. 1825, struck its hardest snag when House Rules Committee tabled the measure after deferring it earlier. Bill now would require petition signed by more than 200 Representatives to force it out of committee. (Page 11)

Highway bill will be considered this month by Senate, calling for \$910 million in federal aid, compared with \$800 million in the House bill. A.G.C. statement on legislation was submitted to Senate committee by Vice President George C. Koss. (Page 9)

Senate Labor Committee on March 31 agreed to Taft-Hartley Act amendments substantially in line with President's proposals. A.G.C. notified committees of both Houses that members would be opposed to easing of ban on secondary boycotts in construction. (Page 11)

NOW... and YEARS from NOW *Satisfaction*

When you specify Universal Vitrified or U. S. Concrete Pipe you can be sure of three things.

First, highest product quality and dependability.

Second, prompt delivery. Strategic location of our eight plants permits prompt shipment and keeps freight costs down.

Third, fair and competitive pricing gives you maximum value for every dollar spent.

These factors add up to permanent satisfaction... for you — and for those who rely on your judgment.

Westinghouse Electric Corp.

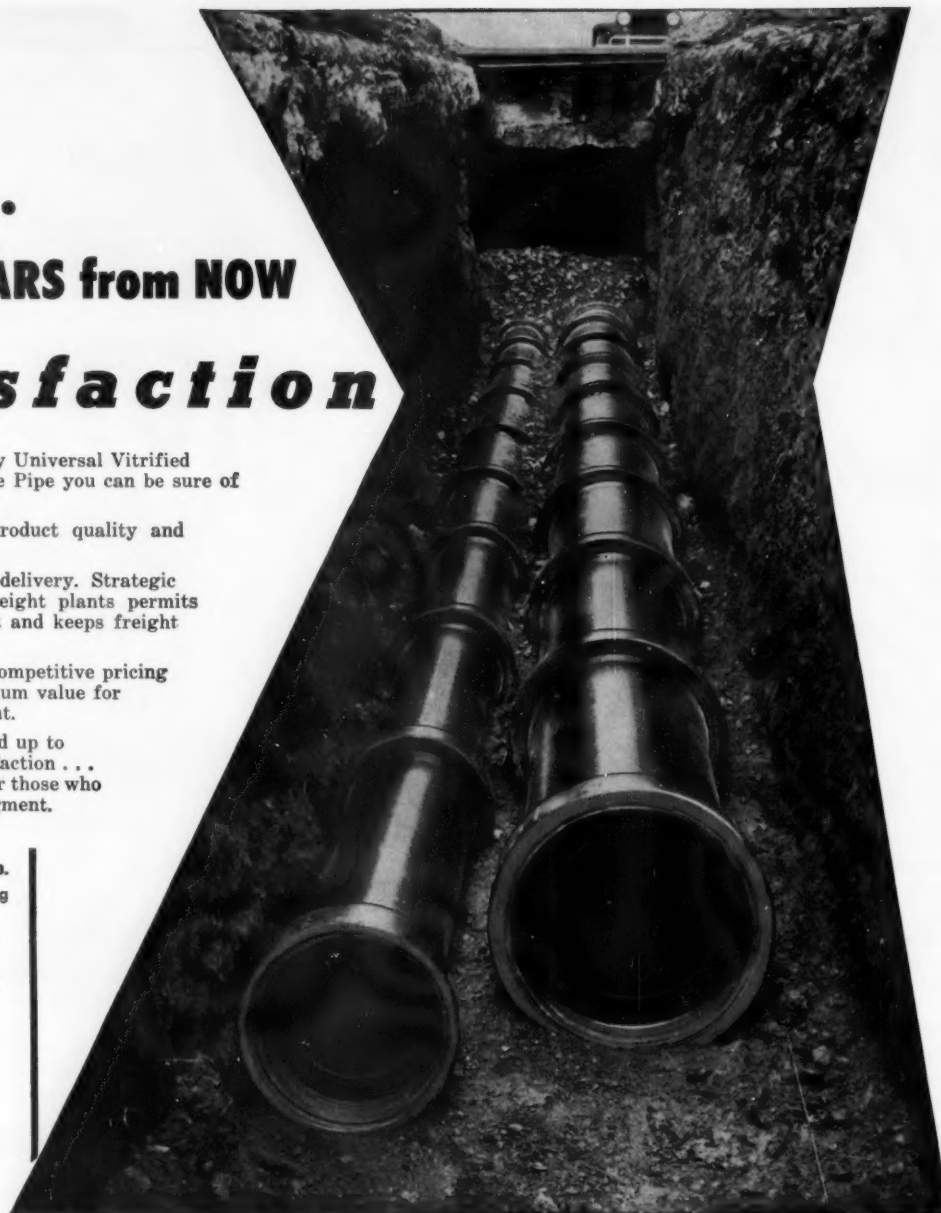
Underground Waste Piping System, Mansfield, Ohio
6" and 8" extra strength vitrified pipe with Tylox Neoprene Rubber Gaskets

Contractor

Friebel & Hartman, Inc.
Shelby, Ohio

Consulting Engineer

Floyd Browne
Marion, Ohio



PRODUCTS

Sewer Pipe (Vitrified)	Slipseal Sewer Joint	Flue Lining
Sewer Pipe (Concrete)	Segment Sewer Block	Stove Pipe
Vitrified Liner Plates	Meter Boxes	Chimney Tops
Tylox Flexible Rubber	Ship Lap Wall Coping	Chimney Pots
Coupled Vitrified Pipe	Septic Tanks	Fire Brick
Aerodrane Filter Block	Drain Tile	Fire Clay
Vitrified Clay Plate Lined Concrete Pipe		

SALES OFFICES:

BALTIMORE, MD.—HALETHORPE BRANCH—Box 7769.

PHILADELPHIA, PA.—P. O. Box 30, BRISTOL, PA.

Tel. Enterprise 6015

CINCINNATI, OHIO—P. O. NEWTOWN, OHIO—Box 215.

Tel. ElkrIDGE 790

Tel. Bristol 5571

Tel. Locust 7846

FACTORIES:

BALTIMORE, MD.,
PALMYRA, OHIO (2),

CINCINNATI, OHIO,
PHILADELPHIA, PA.,

NEW PHILADELPHIA, OHIO,
UHRICHVILLE, OHIO (2)

UNIVERSAL SEWER PIPE CORPORATION UNITED STATES CONCRETE PIPE CO.

• GENERAL OFFICES • 1500 Union Commerce Building • CLEVELAND 14, OHIO

» AS THE FIRST quarter of 1954 ended, amid controversy and uncertainty over business conditions—whether the country is undergoing a readjustment, a contraction or a recession, and what its extent and duration may be, by whatever name—one fact which stood out clearly was that the construction industry was continuing at a high rate of activity.

This fact was widely noted in both government and private business and in the press. In some quarters it was hailed as an indication of a building boom signaling a business upturn which would make 1954 one of the best years in history.

The optimistic outlook for construction was based on reports by the Department of Commerce and the F. W. Dodge Corporation showing that in January and February activity in the industry was greater than in the corresponding period a year ago.

The Commerce Department's Office of Business Economics, in a release on the general business situation March 24, said:

Construction Well Sustained

"Construction activity has been well sustained through the winter months with the total work put in place exceeding a year ago. On a seasonally adjusted basis, the construction rate has been edging upward for several months. Public construction has been on a downward trend with military facilities work and public hospital construction a third lower in January and February than a year ago. On the other hand, school building, highway construction, and sewer and water construction were all higher than in early 1953. Private construction activity was 5 per cent higher in the first two months of 1954 than a year earlier."

Secretary of Commerce Sinclair Weeks cited this upward trend in construction in an address in Toronto, Canada, March 22 in which he said the United States economy is "in excellent shape."

The F. W. Dodge Corporation reported on March 13 that contracts awarded for future construction projects in 37 states covered in its surveys "smashed several records for dollar volume in February." The gross figure of \$1,221,260,000, up 7 per cent over the previous February high set in 1951, and 20 per cent ahead of February, 1953, set an all-time high mark for any February in Dodge's 63-year history. It was also 6 per cent higher than in January of this year, contrary

Construction Continues Dynamic Role in Underpinning Economy

- Administration Maintains Country 'in Good Shape'
- Congressional Unit, C.E.D. Suggest U. S. Plans

to the usual tendency for construction totals to drop off slightly in February. With the January contract awards, which were "surprisingly strong," the combined January-February totals were also at an all-time high, being 9 per cent ahead of the previous January-February high set in 1951, and 13 per cent greater than the first two months of last year, which started off a record-breaking annual volume.

Proposals for Government Action

Meanwhile, the controversy over the size and character of the fall-off in general business activity was accompanied by another over what governmental actions should be taken, if any, as a safeguard against further contraction.

Particularly significant in this discussion are two recent reports, one by the Congressional Joint Committee on the Economic Report and the other by the private Committee for Economic Development.

The Joint Economic Report of the congressional committee analyzes the January 1954 Economic Report of the President, together with testimony heard in executive and open sessions from key Administration officials and interested individuals and groups.

While recognizing the declines which have taken place in economic activity, the committee expresses confidence that "any serious further recession can be avoided." Its confidence is based on these factors:

1. There is a general feeling that the basic economy is essentially healthy, in part because of institutional improvements in recent decades, and in part because the postwar inflation has been brought under control.
2. There is a recognition generally of "powerful, long-run sustaining forces in the economy," in the needs of a growing population and the capabilities of a dynamic enterprise system.
3. While committee members differ as to the relative emphasis which should be given to encouragement of investment expenditures and expanded consumption, the committee is unanimous in recognizing the spirit of the

Employment Act of 1946 as a "strong reason for viewing the transition years optimistically." If the government accepts its responsibility to create a climate and to pursue programs which will advance the objectives of the Employment Act, the committee believes complementary private demands for investment and consumption "will be sufficient to forestall serious economic declines."

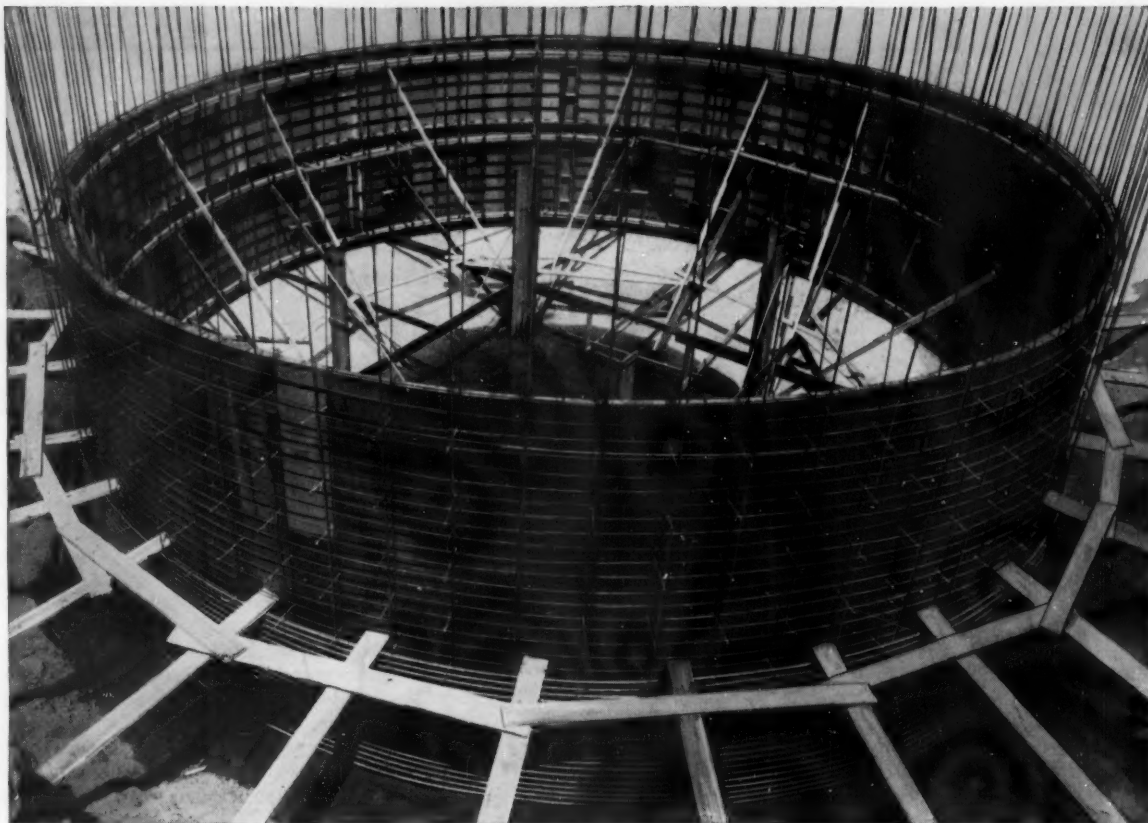
4. The Administration not only is prepared to use the powers it now has, or has recommended, but various additional devices are available. The committee agrees with the President that "the arsenal of weapons at the disposal of the government for maintaining economic stability is formidable," and says we must be prepared to use these weapons as need arises.

Committee Recommendations

Turning to specific legislative recommendations in the Economic Report of the President, the committee favors:

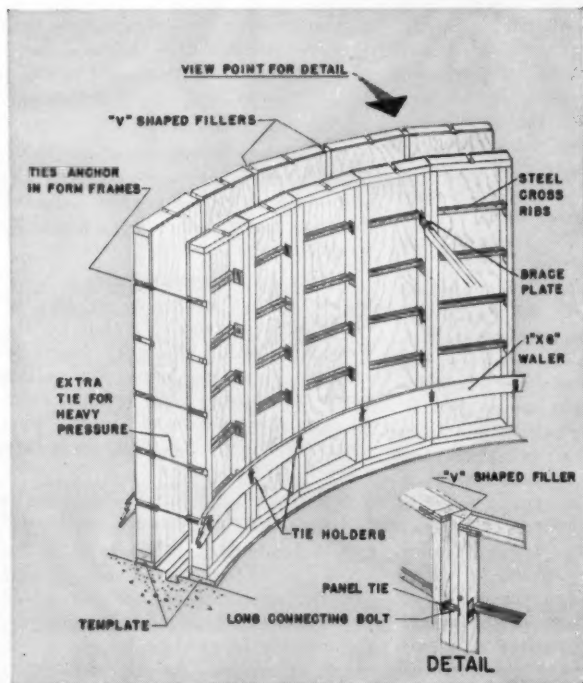
- Increasing the federal debt limit from the present \$275 billion.
- Enactment of the President's proposals for broader old-age and survivors' insurance coverage.
- Broader unemployment compensation coverage and strengthening the state systems by raising the potential duration and dollar maximums of weekly benefits.
- Flexible government aids to housing to permit expansion in case of need, with permissive action by the President within statutory limits to regulate maximum loan value ratios, terms of maturity, and interest rates on government-insured loans, plus measures to strengthen the secondary market for mortgages.
- Advance planning of public works and creation of a "works reservoir."
- A flexible tax policy to meet the needs of economic stability and growth; accelerated depreciation of physical assets; liberalized provisions for carrying forward net losses.

(Continued on page 9)



Setting Up Forms for Sewage Disposal Tank, St. Louis County, G. L. Tarlton Co., G. C.

SYMONS FORMS for CURVED WALLS



Symons Rib panels are used with V-shaped fillers at each joint. Sturdy wedge-bolts secure the three pieces together and also hold the ties in place. Curved walers (see photo) or 1" x 6" flat walers (see perspective) may be used for alignment.

Contractors report savings of \$5000.00 on forming costs of Sewage Disposal Plants. Engineers are well pleased with the smooth finished walls.

Symons offers a complete engineering service to solve your toughest forming problems. Send us the plans for your next job and a complete layout and cost sheet will be furnished without charge.



Symons

CLAMP and MFG. COMPANY

4259 West Diversey Ave., Dept. D-4, Chicago 39, Illinois

Please send me the items checked:

- ☐ Information regarding Symons Panel Forms
- ☐ Information regarding Column Clamps, Shores, Bar Ties

Name

Address

City Zone State

(Continued from page 7)

On agricultural policy, the committee thinks it likely that the proposed shift to flexible price supports and "modernized parity" at this time would be "an unnecessary disrupting factor," whatever their merits "may or may not be as a long-run program." Instead, the committee urges an aggressive policy for expanding markets at home and abroad, and increased nonmarket disposition of surpluses to institutions for the needy, school lunches, and foreign relief.

'Defense Against Recession'

The CED report, issued March 22, is entitled "Defense Against Recession: Policy for Greater Economic Stability" and deals broadly with the roles of business, private financial institutions, state and local governments and the federal government in maintaining a stable, growing economy.

Capital Outlays Still High

Expenditures for new plant and equipment by American business this year are being scheduled at a rate almost as high as actual outlays in 1953, according to the regular annual survey of capital budgets conducted during February and early March by the Securities and Exchange Commission and the Department of Commerce.

Total business investment planned for this year is \$27.2 billion, only 4 per cent less than expenditures for plant and equipment last year, the survey shows.

Manufacturers are planning an outlay of \$11.4 billion, 7 per cent below last year.

Mining and commercial companies expect to spend about 3 per cent more than in 1953.

Public utilities plan to invest only slightly less than the \$4.4 billion they spent last year.

The largest cutback in capital outlay is planned by the railroads, which will spend about 28 per cent less. Other transportation will be down about 4 per cent from 1953.

The study was prepared, it is explained, without particular reference to the present business situation. "Some of the steps recommended herein are, we believe, appropriate at any time," the report adds. "Others, being preparatory in character, are better done sooner than later. But many are

Senate Action Expected on Highway Bill

» THE SENATE was expected to start debate early in April on the bill to authorize federal aid highway expenditures for the fiscal years starting July 1, 1955 and 1956. The bill will authorize the largest federal aid highway construction program in history.

As passed by the House, the bill would authorize federal aid expenditures of \$800 million for each of the two fiscal years, compared to the \$575 million authorized by the current legislation. The bill, as it was reported by the Senate Public Works Committee, would increase the annual authorizations to \$910 millions.

The House version of the legislation would also authorize annual expenditures of an additional \$75 million for forest highways, parkways and other federal projects. The Senate version

would authorize similar expenditures of \$100 million, making a total of \$1.010 billion per year.

Public hearings were held by the Senate committee at the time when many A.G.C. representatives were attending the association's 35th annual convention. Later Vice President George C. Koss, who had testified before the House committee, submitted a statement to the Senate committee in which he quoted the A.G.C. convention resolution which supported annual authorizations of at least \$900 million, and in which he assured the committee that the industry had ample capacity to execute the expanded highway construction program promptly and efficiently.

Comparative data on the bills (in millions of dollars) follows:

Authorization	Present Law	House Bill	Senate Bill
Primary system	\$247.5	\$270	\$342
Secondary system	165	180	228
Urban	137.5	150	190
Interstate system	25	200	150
Total federal aid	\$575	\$800	\$910

appropriate only in certain circumstances, and in degrees and combinations attuned to particular situations."

The CED adopts the premise that ups and downs cannot be avoided in the American economy, but that there is "a vast difference between moderate and inevitable ups and downs and the great, general economic swings we have sometimes experienced." The latter are not inevitable, and economic fluctuations can be reduced without loss of freedom or restriction of economic growth or efficiency, it says.

"Our national defenses against economic decline are strong—stronger than ever before—but they can be strengthened further," the report says.

After analyzing factors of economic growth and stability and recommending policies which business and state and local governments might adopt to strengthen the economy, the CED offers the following proposals, among others, for federal action:

- Early in an actual or threatened recession monetary policy should aim to provide the most favorable financial conditions for expansion.

- The federal government should adopt a stabilizing budget policy, under which it will not try to eliminate or reduce the large deficit that will

automatically emerge in a recession. A stabilizing budget policy should also produce surpluses to reduce the debt when employment is high.

- Federal income tax refunds should be paid more promptly.

- Businesses should be allowed to carry back losses to apply against profits of the two preceding years, instead of one as at present.

- The federal government should establish a fund for loans to state unemployment compensation funds in danger of exhaustion.

- The terms of federal loans and loan guarantees, including housing credit, should be flexibly adapted to changing economic conditions.

- In event of a serious economic decline, a temporary cut in federal taxes should be considered to stimulate private expenditure.

- In the event of a serious decline involving a large drop in construction activity, federal public works expenditures should be increased.

- Federal loans should be offered to state and local governments for planning construction.

- Federal credit support to state and local governments for construction should be prepared in advance, for institution when needed.

NOW IT'S EIGHTEEN NORTHWESTS

Only the most satisfactory service could sell a man into the purchase of 18 machines of one make. The Leo Butler Co. of College Park, Md., has used Northwests for many years and the fact that they are now operating their 18th Northwest is a testimonial to the satisfaction Northwests give.

Not only has the Butler organization used Northwests consistently but they have experience with every type of Northwest built. They know Northwest Cranes, Draglines, Shovels, Pullshovels and Truck Cranes. They have used them all and they know all their advantages.

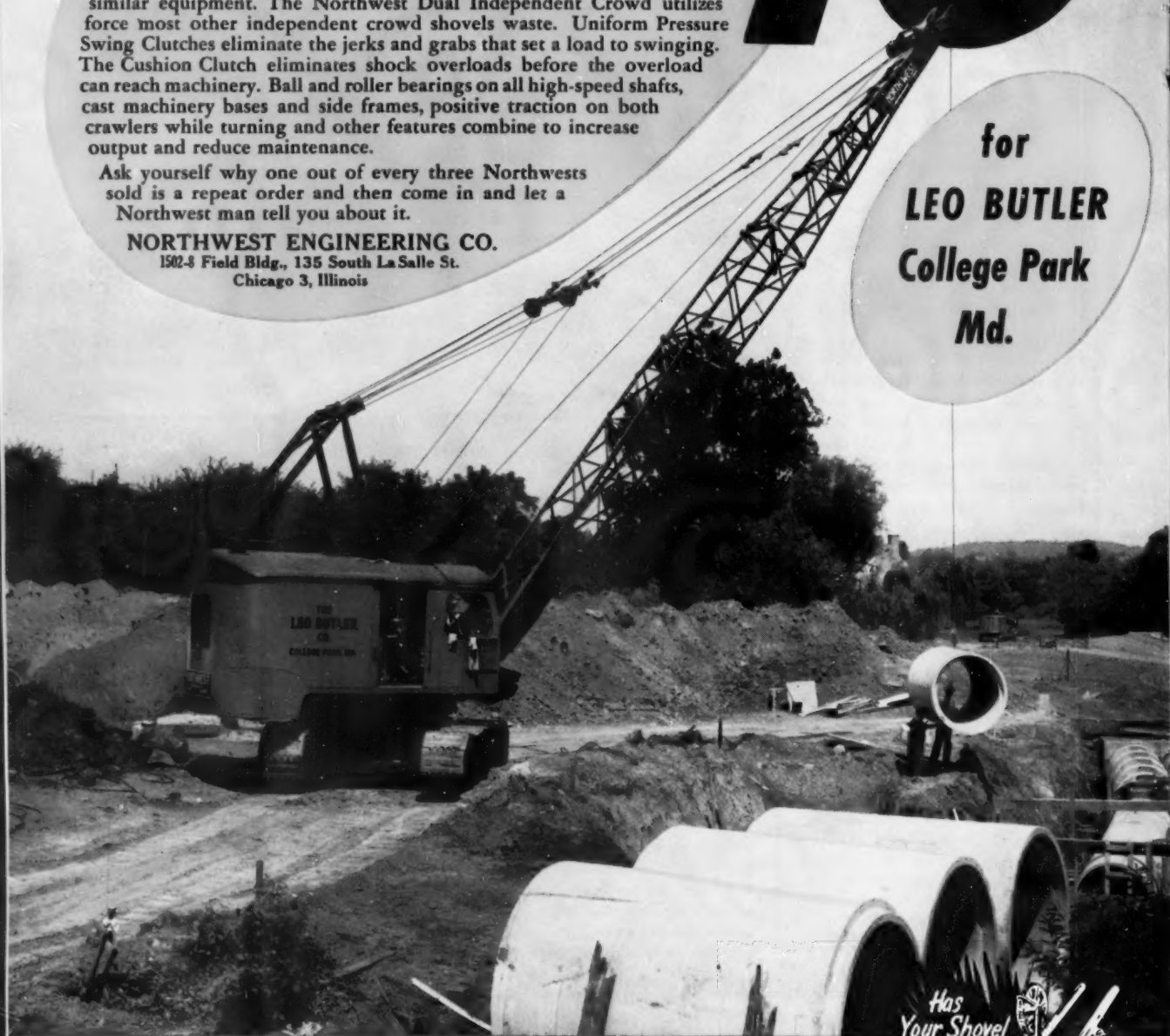
The Northwest brings you a combination of features found in no other similar equipment. The Northwest Dual Independent Crowd utilizes force most other independent crowd shovels waste. Uniform Pressure Swing Clutches eliminate the jerks and grabs that set a load to swinging. The Cushion Clutch eliminates shock overloads before the overload can reach machinery. Ball and roller bearings on all high-speed shafts, cast machinery bases and side frames, positive traction on both crawlers while turning and other features combine to increase output and reduce maintenance.

Ask yourself why one out of every three Northwests sold is a repeat order and then come in and let a Northwest man tell you about it.

NORTHWEST ENGINEERING CO.

1502-8 Field Bldg., 135 South LaSalle St.
Chicago 3, Illinois

for
LEO BUTLER
College Park
Md.



NORTHWEST

CRAWLER and TRUCK MOUNTED SHOVELS • CRANES • DRAGLINES • PULLSHOVELS



» THE bill to assure the right of judicial review of disputes arising under federal contracts was formally reported to the House on March 22 by the Judiciary Committee and was placed on the consent calendar to await the call of the calendar on the first and third Mondays in April.

The bill, S. 24, had been passed by the Senate in June 1953 for the purpose of offsetting effects of the Supreme Court decision in the *Wunderlich* case. The House committee approved a slightly different version from that passed by the Senate. The text was recommended by the Comptroller General. The amended text is:

Text of Bill

"That no provision of any contract entered into by the United States, relating to the finality or conclusiveness of any decision of the head of any department or agency or his duly authorized representative or board in a dispute involving a question arising under such contract, shall be pleaded in any suit now filed or to be filed as limiting judicial review of any such decision to cases where fraud by such official or his said representative or

Judicial Review Bill Due for House Action

- Passed by Senate, S. 24 Is Reported Favorably by Committee

board is alleged: *Provided, however*, That any such decision shall be final and conclusive unless the same is fraudulent or capricious or arbitrary or so grossly erroneous as necessarily to imply bad faith, or is not supported by substantial evidence.

"Sec. 2. No Government contract shall contain a provision making final on a question of law the decision of any administrative official, representative or board."

Objections Overcome

The committee reported that: "At the outset of hearings in the first session (1953), objection was voiced by representatives of the Department of Defense and various defense industries to these bills. The objection was predicated upon a supposed fear that the inclusion of the Comptroller General in the wording of the bill would destroy the finality which existed under the Defense Department procedures.

"However, at the outset of the hearings in the second session (1954), the Comptroller General submitted to the committee an amendment to the bill in the form of a substitute. The amended version was favored by practically all the witnesses, including those who had formerly opposed the bill. It is this version which the committee favorably reports in its amendments."

After passage by the House, the bill will have to be returned to the Senate. If the Senate concurs in changes made by the House, the bill can go to the White House for signature. If the Senate does not approve of the changes, the bill will have to be sent to conference for adjustment of the differences and the compromise must be approved by both houses.

The Associated General Contractors of America had taken the lead in recommending to Congress the need for legislation for this purpose.

Oppose Easing of Boycott

The Senate Labor Committee on March 31, by a party line vote, agreed to amendments of the Taft-Hartley Act which were substantially those recommended by President Eisenhower in his message to Congress of March 11. The House Labor Committee continued into April its executive sessions for consideration of the proposals. (February *CONSTRUCTOR*, page 37.)

The President had recommended that "the act be clarified by making it explicit that concerted action against ... an employer on a construction project who, together with other employers, is engaged in work on the site of the project, will not be treated as a secondary boycott."

The Associated General Contractors of America notified both committees that its members would be opposed to any such change of the act as discriminatory against the construction industry and inconsistent with the basic principles of the act.

The draft approved by the Senate committee includes certain limitations on the legality of such secondary boycotts. The House had not yet taken final action on the legislation by the first of April.

Rules Committee Tables Subcontractor Bill

- Worst Blow to Legislation; Would Need Petition for Release

» THE proposed Federal Construction Contract Act (H.R. 1825 and S. 848) which would regulate the bidding and award of subcontracts on federal public works projects has been tabled by the House Rules Committee.

The motion to table the bill was voted by the Rules Committee on March 5. This constituted an adverse finding, and was stronger than the committee's action in February in denying a rule for consideration of the bill on the House floor.

It is possible that the Rules Committee could reverse its decision or that a petition signed by more than 200 Representatives could force the bill out of the committee and onto the floor. Such cases are rare.

This legislation has been supported vigorously by mechanical specialty contractors and their national associations. It has been opposed with equal vigor by The Associated General Contractors of America as detrimental to the public interest.

The bills previously had been reported favorably by the Senate and

House Judiciary Committees. The Senate bill had been on that chamber's consent calendar but objections had been raised to its consideration each time it was called.

The A.G.C. Subcontractor Relationships Committee reported to the association's 35th annual convention in March that neither passage, nor rejection, of the legislation will solve the problems of developing and maintaining cordial relationships between general contractors and subcontractors, or of securing more widespread observance of the recognized ethical practices of the industry by all those in it in the bidding and award of subcontracts.

The committee therefore submitted recommendations which were adopted by the convention for additional steps by which general contractors and the A.G.C. locally and nationally can voluntarily take constructive action to help improve, where necessary, the procedures for receipt of bids and award of subcontracts, and the relationships between general contractors and subcontractors. (Page 36)



V-LOK

*-the Versatile
Steel Framing*

1. Designs readily into any framing plan, occupancy need or architectural effect.
2. Knocks pounds off the square foot weight and days from erection time.
3. Gets a building under cover so fast inside work is greatly accelerated.
4. Ideal for cluster type school layouts and unit module additions.
5. Engineered to Macomber standards for industrial purposes but perfect for the modern glass enclosed home.



MANUFACTURING PLANTS, WAREHOUSES



SUPERMARKETS & COMMERCIAL BLDGS.



MODERN SCHOOL BUILDINGS



INDUSTRIAL PARKING SHEDS

Complete freedom for architectural finish, mechanical layouts and floor arrangement.

Call your Macomber representative or
ORIGINATORS OF THE



Contact us for complete information.
OPEN WEB STEEL JOIST

STANDARDIZED STEEL

V-BAR JOISTS • LONGSPANS

MACOMBER INCORPORATED

CANTON 1, OHIO

BUILDING PRODUCTS

STEEL TRUSSES • STEEL DECK

• ENGINEERING • FABRICATING AND ERECTING •

A Series of Graphs Outlining the Construction Trend

Compiled by The Associated General Contractors of America

TREND OF CONSTRUCTION COSTS

The average of construction costs in the principal construction centers of the United States for March stands at Index Number 420 according to the A.G.C. Index. The cost figure for March 1953 was 399. The 1913 average equals 100.

WAGE AND MATERIAL PRICE TRENDS

The average of wages in the principal construction centers of the United States stands at 587 for March. One year ago the average stood at 557. The average prices paid by contractors for basic construction materials for March stand at Index

Number 309. The average a year ago stood at 294. The 1913 average, again, equals 100.

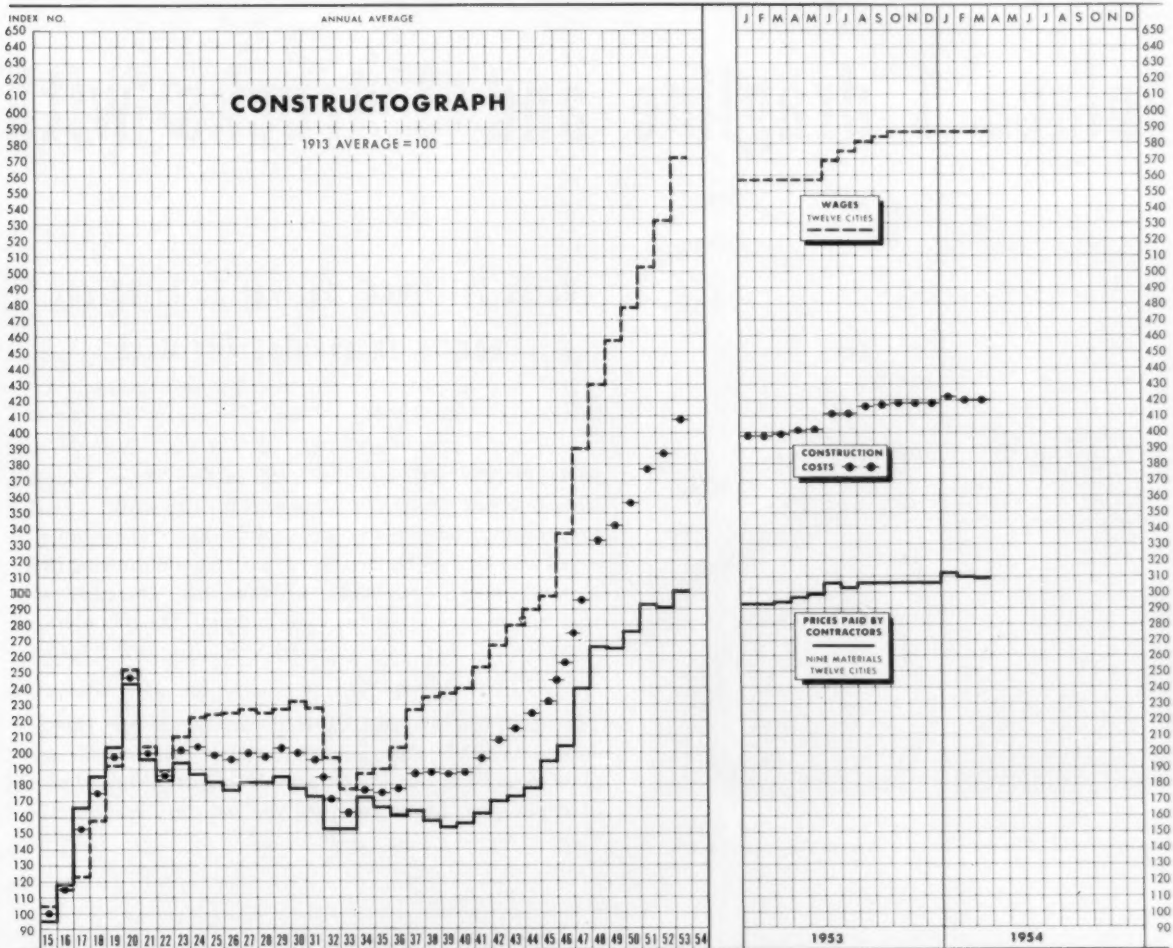
CONTRACT AWARDS IN 37 STATES

The volume of contracts awarded during February (Index Number 221, based on 1936-38) is an increase of 14 points from January and an increase of 27 points from February 1953. (F. W. Dodge Corp.)

REVENUE FREIGHT LOADINGS

Revenue freight loaded during the first 12 weeks of 1954 totaled 7,239,475 cars. For the same period in 1953, loadings amounted to 8,167,454 cars. This represents a decrease of 11%.

Wage, Material Price and Construction Cost Trends





Replace 1 dragline and 3 trucks with



Tournapull leaves shoulder, makes tight turn, and returns to borrow along blacktop. Low-pressure tires do no damage to pavement.

**Units self-load, deliver 35 to 43 yds.
hourly on shouldering work**

BOOTH AND OLSON, INC., Sioux City, Iowa, bought their first two 7-yard D Tournapulls for city work — grading, curbing, doing gutter jobs and the like. "These units," says Foreman Earl Duffus, "made such a good showing that 2 months later we purchased two more 'D's'. These last two rigs we are now using for road building. On shouldering operations, 2 'D's' have replaced 1 dragline and 3 trucks. They can't be beat."

The illustrated job shows several reasons for Mr. Duffus' enthusiasm. Here, contractors had 96,000 yards of clay and loam to move to widen and re-grade U.S. Highway 34 west of Burlington, Iowa. To speed the job, they roaded 2 of

LeTourneau-Westinghouse Company

Self-loading from roadside pit, "D" heaps 5 to 5½ pay yards of clay and loam in 1¼ minutes.

"D" spreads next to blacktop to build up new shoulder. Dump is made in 15 to 24 seconds over 90 ft.



2 D Tournapulls

the Tournapulls from St. Joseph, Missouri. The 300-mile trip took 16 hours (an average of 19 mph).

At work, each Tournapull self-loaded 5 to 5½ pay yards of clay and loam in 1¼ minutes. 4300' haul took a little over 3 min. (16 mph). Spread, 180° turn, plus 4700' travel over blacktop back to cut, took 2½ minutes (24 mph). Time for the 9400' cycle totaled 7 minutes. Output for the 2 "D's" averaged 70 to 78 pay yards per 50-minute hour.

Get the full story

Performance like this is one reason so many contractors are so enthusiastic over their D Tournapulls. *Interchangeability*, reviewed in the next column, is another feature you may find of interest. With Tournapulls, you can own another trailing unit, a rear-dump for instance, for ¼ the price of another complete unit. Get all the facts. Ask for a demonstration on your next job.

Tournapull—Trademark Reg. U.S. Pat. Off. DP-578-H

Save up to 75%

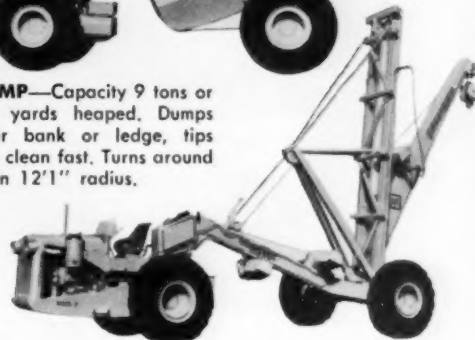
On all equipment pictured, Tournapull prime-mover represents about 75% of total machine investment. You can save money, after your initial investment, by purchasing haul units only, and interchanging them behind the same D Tournapull prime-mover. Tires, wheels, brakes can be changed from haul unit to haul unit, and from haul unit to prime-mover for additional economy.



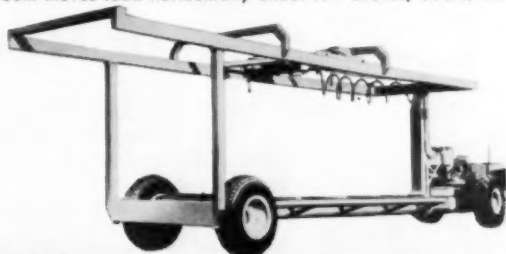
SCRAPER — Capacity 7 yards. Can self-load most scraper dirt, yet size is ample for profitable use in pusher fleets. Top speed, 28 mph — same as other units shown.



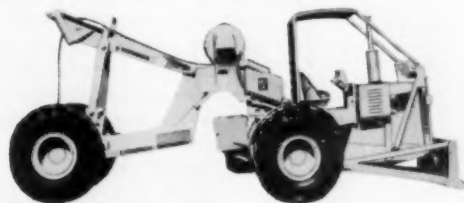
REAR-DUMP — Capacity 9 tons or 10 cubic yards heaped. Dumps clear over bank or ledge, tips vertical to clean fast. Turns around non-stop in 12'1" radius.



CRANE — Capacity 10 tons. Transports any load it can lift. Needs no outriggers. Lifts 33', reaches 35'. Sliding boom moves load horizontally under low arches, doors, etc.



FLAT-BED — Capacity 10 tons. Self-loads with traveling overhead hoist. Reaches out 10' beyond end of flatbed, lifts up to 12'. One-man controlled from ground or cab.



LOGGING ARCH — Line pull, 37,200 lbs. Drives at high speeds over ordinary skid roads. Winch on arch permits yarding from any angle. Skids logs, handles winching jobs.

Also available . . . front-mounted 8' Bulldozer blade . . . 9' V-type Snow Plow . . . Cab, Cab Heater, Windshield Wipers, Horns . . . Lucite Windshield, etc.

PEORIA, ILLINOIS



A Subsidiary of Westinghouse Air Brake Company



Western Hills Grade School, Omaha, Nebraska
Noel S. Wallace, Architect. Shelton and Sons, Contractor.

**Truscon Intermediate
Classroom Windows—**

Light, Bright, Weathertight in New Omaha School

Many generations of students at Western Hills Grade School in Omaha are going to enjoy superior light and ventilation. Architect Noel S. Wallace specified

Truscon Intermediate Classroom Windows throughout the well-daylighted building.



All types of Truscon Intermediate Steel Windows are products of the highest quality materials and workmanship. Specially rolled solid steel sections, substantial in weight and original in design, provide advantageous weathering and attractive appearance. Truscon Classroom Windows are fabricated to these same exacting specifications, Bonderized and painted. You can

use them with complete confidence in your choice.

Upper lights may be glazed with one of several types of light-diffusing, glare-reducing, or heat-absorbing glass. Provision may be made for double-insulating glass up to 1" thick.

Classroom Windows are but one of the many types of Truscon Steel Windows currently being specified for school construction. Others are: Double-Hung Steel Windows with or without sill vents; Intermediate Projected Windows; Intermediate Combination Windows; Maxim-Air® Steel Windows; Donovan Awning and Truair® Windows; Architectural Projected Windows. Ask your Truscon representative or see Sweet's File for more information or ideas.

TRUSCON®



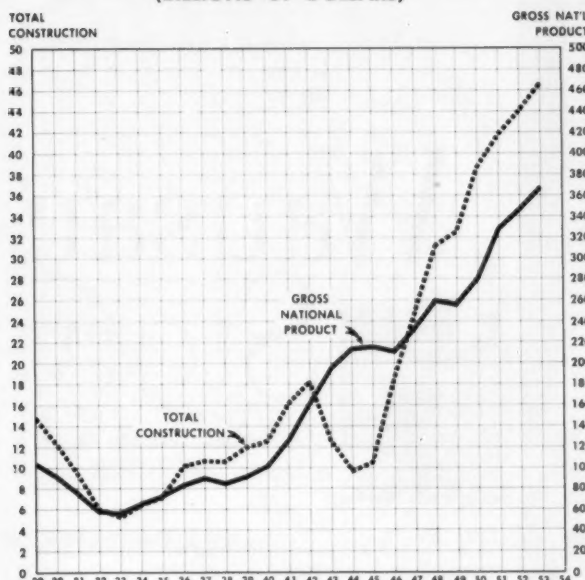
a name you can **build** on



TRUSCON STEEL DIVISION REPUBLIC STEEL

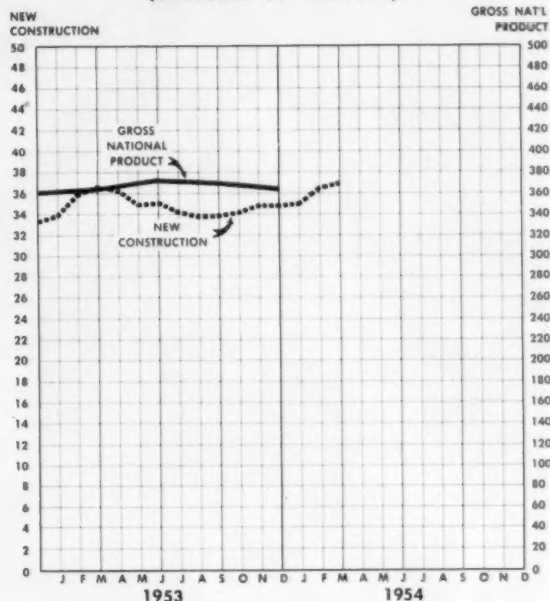
1100 ALBERT STREET • YOUNGSTOWN 1, OHIO
Export Department: Chrysler Building, New York 17, N.Y.

● **TOTAL Construction Compared with Gross National Product**
(BILLIONS OF DOLLARS)



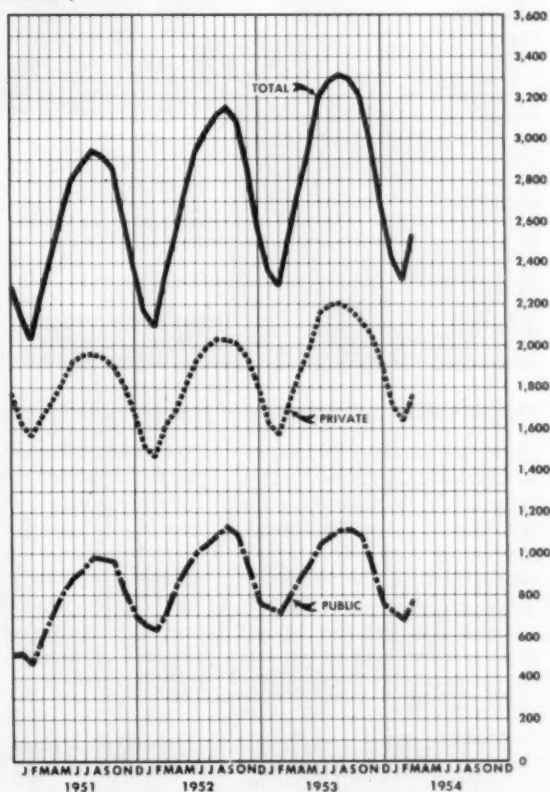
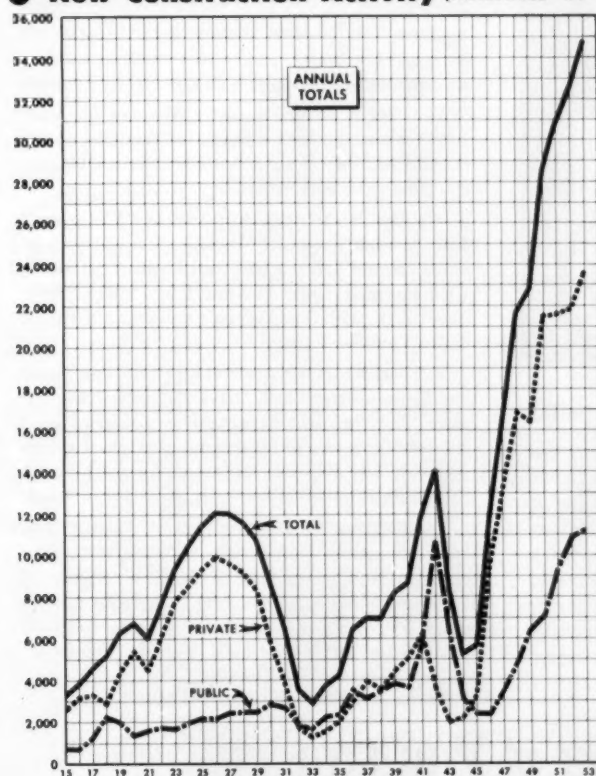
DATA SUPPLIED BY DEPT. OF COMMERCE

● **NEW Construction Compared with Gross National Product***
(BILLIONS OF DOLLARS)



* Seasonally adjusted at an annual rate

● **New Construction Activity (MILLIONS OF DOLLARS)**



DATA SUPPLIED BY DEPTS. OF COMMERCE AND LABOR

What is there about Wausau, Wisconsin, that makes it the ideal home for one of the world's most important insurance companies?



Mr. Ross (seated, left) has a friendly "Kaffeeklatsch" with Pres. W. G. Whyte and V. Pres. M. C. Engstrom (standing) of Wausau's First American State Bank—a correspondent of the Chase National.

Employers Mutuals of Wausau are "good people to do business with."

There's a little bit of Wausau on the sidewalks of New York—and in all the 89 cities where this Company has offices. We write all lines of fire and casualty insurance—everything but life insurance. Our largest line is workmen's compensation. We have two reputations, born and raised in Wausau, that we aim to hold. The *first* is

that we'd rather prevent than just pay for an accident. Our accident-prevention program, second to none, means lower insurance costs to policyholders. The *second* is claim service. Handled direct by our branches, this service is unexcelled in the insurance field for care and fairness, with a signal record for prompt payments.

Employers Mutuals asked a visiting New York banker for his comments. Here is his story:

Wausau Story

By FRANCIS G. ROSS, Vice President
Chase National Bank, New York



- There's a "personality" about Wausau. It's a personality you like.

You feel it when you visit Wausau's First American State Bank and have a cup of coffee (in the board room!) with some of the officers. You feel it when they tell you what they did during Christmas week. A full-time organist played Christmas music in the lobby, and school children came in and serenaded the bank's customers with carols.

You feel it when you meet Wausau businessmen—when you see Ed Seim, for example, standing out in front of his haberdashery nodding and chatting with passers-by.

You feel it when you drop over to "The Mint," Milt Mueller's popular Wausau restaurant where shoppers and Third street businessmen gather for their morning coffee. Hearing I was visiting from New York, Milt insisted on our having a cup of coffee "on the house."

You feel it when Robert Hagge tells you about the Community Chest Drive he headed up this year. They brought in \$98,000—a mighty good showing for a city of 9000 families. Robert added proudly that 100% of the employees of his own company, Employers Mutuals, gave to the Fund.

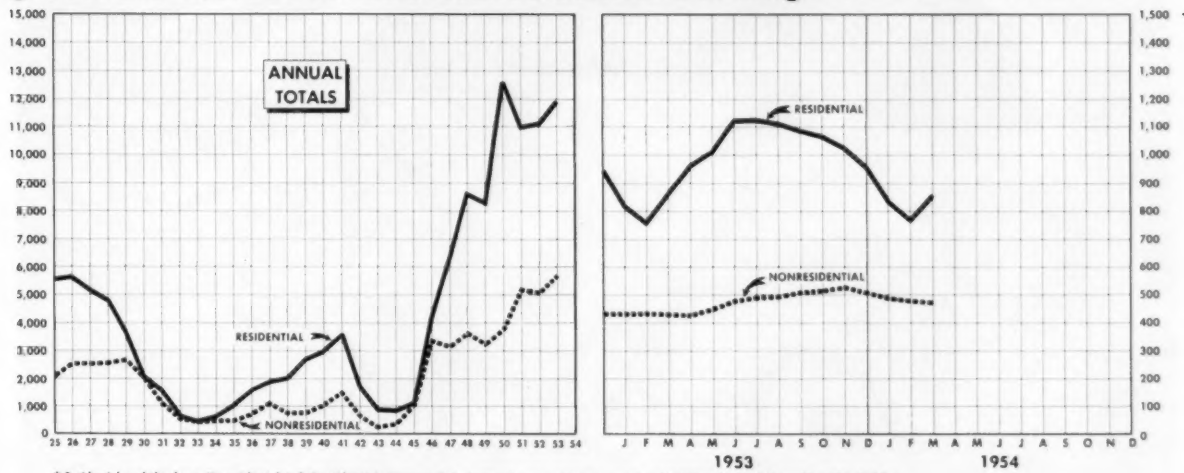
You feel this "personality" about Wausau. And you know that Employers Mutuals naturally absorbed that personality, made it the measure of a way of doing business. And how could a company with such a spirit help but succeed in a country like this where most of us are "Wausau" basically—and like it that way?

Employers Mutuals of Wausau

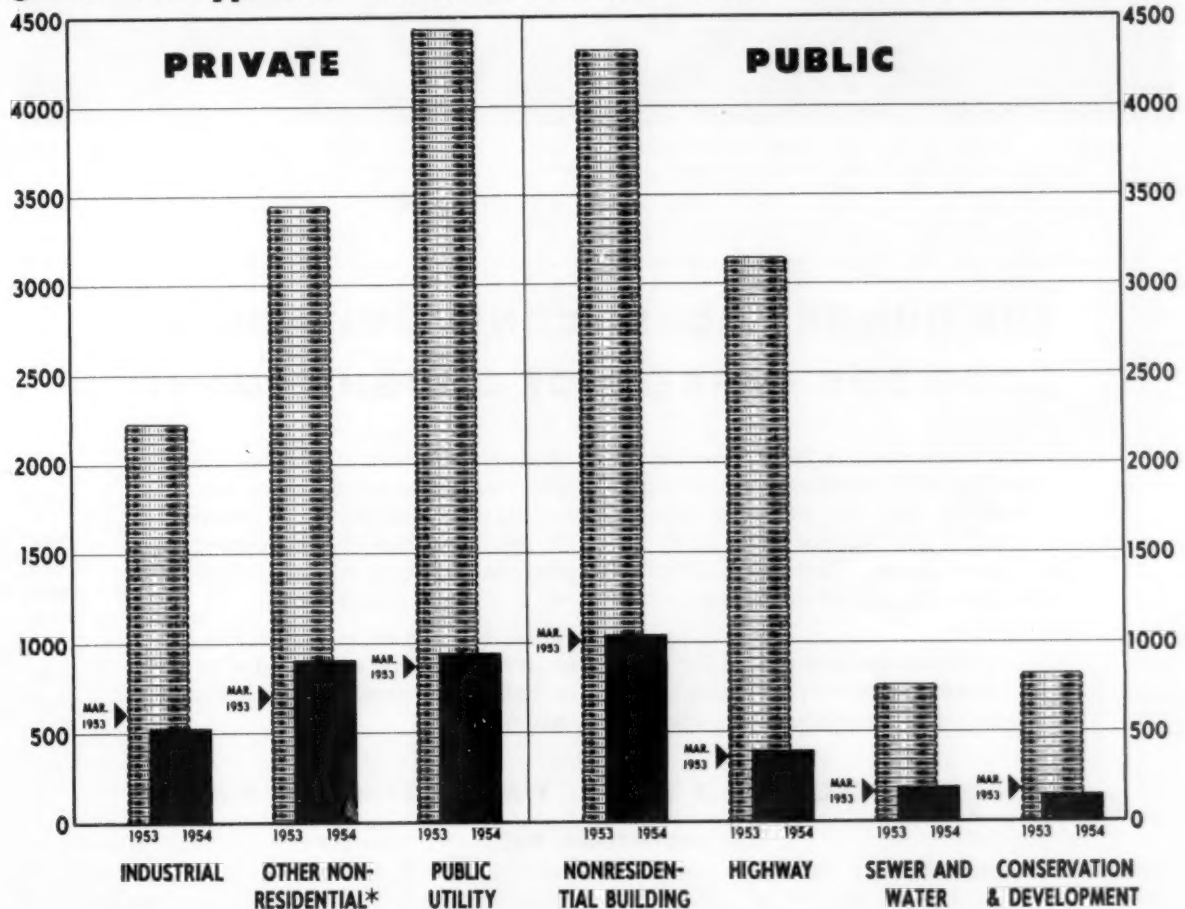


NEW CONSTRUCTION ACTIVITY

● Private Residential and Nonresidential Building * (MILLIONS OF DOLLARS)



● Selected Types: (CUMULATIVE, MILLIONS OF DOLLARS) 1953, 1954 VOLUME THROUGH MARCH





Hungry Horse Dam, a project of the Bureau of Reclamation, Department of the Interior, is on the South Fork of the Flathead River in northwest Montana. It forms a reservoir approximately 34 miles long and $3\frac{1}{2}$ miles wide at the widest point.

Prime Contractors: **GENERAL-SHEA-MORRISON**, a combination of twelve contracting firms.

THE HUNGRY HORSE CONSUMED ALMOST 1,000,000 BARRELS OF LEHIGH CEMENT

Hungry Horse Dam in Montana—fourth largest dam in the world—contains enough concrete to give an 80-pound chunk to every man, woman and child in the United States. There are 3,100,000 cubic yards of concrete in the completed project.

The contractors set new records for sustained concrete placement on large dam construction in completing this project

nearly a year ahead of schedule. Dependable companies helped them set these records with a steady flow of materials to the job. *The Lehigh Portland Cement Company alone supplied almost 1,000,000 barrels of Type II Lehigh Cement.*

Lehigh is proud of its part in this mammoth and vital project—proud of its share in building a stronger, more powerful nation.

LEHIGH PORTLAND CEMENT COMPANY

ALLENTOWN, PA.

LEHIGH PORTLAND CEMENT • LEHIGH EARLY STRENGTH CEMENT • LEHIGH AIR-ENTRAINING CEMENTS • LEHIGH MORTAR CEMENT

For Moderate Income Families in Large Cities

(Formerly referred to as the "Cost of Living Index," compiled by the Bureau of Labor Statistics)

Cost of living for most of the nation's wage earners took a slight dip between January and February, as mild price cuts were registered by many consumer items, the government reported in its Consumer Price Index last month.

The Bureau of Labor Statistics, which compiles this index, recorded the new prices at 115, or 0.2% below January and 0.3% below the all-time high of 115.4 set in October. The new index was also 1.4% higher than a year ago and 13% above the pre-Korean level of June 1950.

Decreases in the following consumer categories brought about the general decline: food prices, 0.4% below January; transportation, down 0.8%; reading and recreation, 0.6%; apparel, 0.2%; and other goods and services, 0.1%. Housing costs rose 0.1%, medical care 0.3% and personal care 0.2%.

The food index declined because of reductions in the cost of fresh vegetables, meats, poultry, milk and eggs.

A particularly soft used car market and recent reductions in the price of some new cars brought about the sharp decline in transportation.

Medical care costs were boosted by higher prescription costs and hospital rates.

The Consumer Price Index, formerly calculated on the base 1935-39=100, was converted beginning last year to the new base 1947-49=100 in compliance with recommendations of the Bureau of the Budget.

A portion of this index below indicates the average changes in retail prices of selected goods, rents and services bought by the average family of moderate income from December 15, 1951 to February 15, 1954.

They are presented here for use by employers who may wish to take these cost of living data into consideration when contemplating adjustments of wages based on increased living costs.

Aside from the change of the base years, the revised index includes prices of about 300 items, compared to some 200 for the previous index. The "weight" assigned to items is now based on facts concerning family expenditures of wage earners and clerical workers found in a survey on consumer expenditures conducted by the bureau.

The first five cities in the table below are checked and reported on monthly. The other 15 cities are surveyed and their indexes published quarterly.

	1951	1952		1952	1953		1953	1954	
	DEC.	JAN.	FEB.	DEC.	JAN.	FEB.	DEC.	JAN.	FEB.
Average.....	113.1	113.1	112.4	114.1	113.9	113.4	114.9	115.2	115.0
New York, N. Y.....	111.2	111.3	110.6	112.0	111.7	111.1	113.0	113.0	112.8
Chicago, Ill.....	114.0	114.0	112.7	114.6	114.2	113.9	116.4	116.7	116.7
Los Angeles, Calif.....	113.9	113.7	114.1	115.3	115.4	114.9	115.8	116.8	116.6
Philadelphia, Pa.....	113.7	113.5	112.4	114.7	114.3	113.7	115.0	115.3	115.2
Detroit, Mich.....	113.7	113.7	113.0	116.0	115.7	115.1	116.4	117.0	116.4
Atlanta, Ga.....	.....	.....	115.1	.....	.....	.....	117.1	.....	.....
Baltimore, Md.....	112.4	.....	.....	114.4	.....	.....	114.5	.....	.....
Boston, Mass.....	112.4	111.8	114.1	112.4	112.1	.....	.....	112.7	.....
Cincinnati, Ohio.....	111.6	111.8	111.1	112.5	.....	.....	114.6	.....	.....
Cleveland, Ohio.....	.....	.....	112.6	.....	.....	112.5	.....	.....	115.2
Houston, Texas.....	115.8	115.4	114.8	116.7	.....	116.1	.....	.....	116.9
Kansas City, Mo.....	.....	113.2	.....	.....	114.3	.....	.....	115.0	.....
Minneapolis, Minn.....	113.3	.....	.....	114.6	114.4	.....	.....	116.6	.....
Pittsburgh, Pa.....	112.8	113.1	112.3	113.4	112.6	.....	.....	114.4	.....
Portland, Ore.....	.....	114.9	.....	.....	114.6	.....	.....	115.4	.....
St. Louis, Mo.....	114.0	.....	.....	114.9	.....	.....	116.9	.....	.....
San Francisco, Calif.....	113.0	.....	.....	115.6	.....	.....	116.9	.....	.....
Scranton, Pa.....	.....	.....	110.8	.....	.....	112.2	.....	.....	113.2
Seattle, Wash.....	.....	.....	114.3	.....	.....	114.6	.....	.....	116.2
Washington, D. C.....	.....	.....	112.0	.....	.....	113.0	.....	.....	114.1

YOU'LL SAVE MONEY!

with the

P&H

Model

105

**YOUR P&H DEALER
WILL SHOW YOU HOW**

FULL 10-TON CRANE CAPACITY

Talk about success stories — you'll write a big one with the P&H Model 105. In fact, you can't afford to be without it. Use it on high-lift crane jobs — for all those smaller odd jobs . . . trenching, grubbing stumps and what have you. It's a cost cutter, ever ready to relieve your bigger machines for more profitable work.

No half-way compromise, the 105 is a complete P&H Truck Crane on a tailor-made P&H carrier . . . loaded with modern refinements that give you greater stability, bigger, faster production . . . and the lowest maintenance cost in the business.

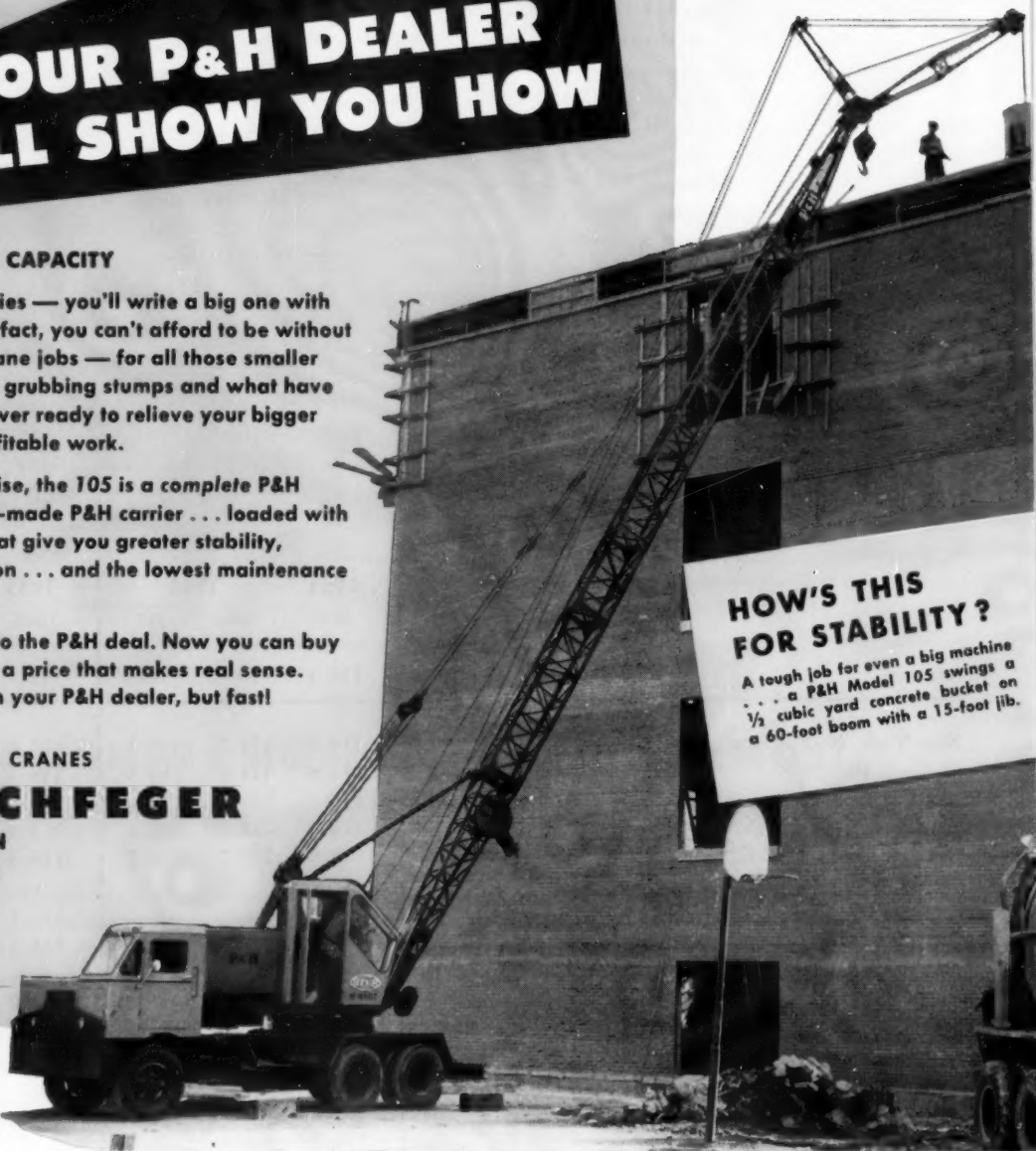
But there's even more to the P&H deal. Now you can buy this terrific producer at a price that makes real sense. Don't delay, check with your P&H dealer, but fast!

P&H TRUCK CRANES

**HARNISCHFEGER
CORPORATION**

MILWAUKEE 46, WISCONSIN

See your
P&H dealer
NOW!



**HOW'S THIS
FOR STABILITY?**

A tough job for even a big machine
... a P&H Model 105 swings a
 $\frac{1}{2}$ cubic yard concrete bucket on
a 60-foot boom with a 15-foot jib.

Your P&H Dealer has the experience, the organization and the facilities to serve you reliably in every way. He's ready to deliver the kind of on-the-ground service that keeps your jobs moving on schedule. Your P&H Dealer is tops in the business. Get to know him.

the **P&H** Line



TRUCK CRANES



DIESEL ENGINES



POWER SHOVELS



PREFABRICATED HOMES



ELECTRIC HOISTS



SOIL STABILIZERS



WELDING EQUIPMENT



OVERHEAD CRANES

Sidelights for Contractors

By John C. Hayes, Counsel

Hayes and Hayes, Munsey Building, Washington 4, D. C.

Taxes

Withholding.—A contractor voluntarily advancing funds to a subcontractor to permit the latter to pay wages of employees in completion of the subcontract work is not liable for taxes to be withheld from such wages, a circuit court decided, where the contractor exercised no supervision of the subcontractor's hiring and firing of employees.

Joint Ventures.—A taxpayer participating in a joint venture involving a lump-sum purchase of surplus war materials, which were resold over a three-year period, was required by the Tax Court to allocate the aggregate profit over the years the venture was in operation, on the basis of each year's sales to total sales. The court agreed with the Commissioner of Internal Revenue that the taxpayer's method of delaying the computation of any profit or loss until all items were sold did not reflect annual income nor permit the filing of annual partnership returns as required.

Medical Expenses.—In a recent case the Tax Court upheld an individual in deducting as medical expenses the costs of transportation and lodging incident to winter residence in Florida, after proof that the trip was taken on the recommendation of his physician for the specific purpose of obtaining relief from a particular ailment.

On the other hand, the Commissioner of Internal Revenue has published a ruling denying the deductibility as medical expenses of the costs of constructing a swimming pool or installing an elevator for reasons of health, although pursuant to a physician's recommendation. These expenditures are classed by the commissioner as permanent improvements of a capital nature which increase the value of the property.

Corporate Stock.—Where a corporation repurchased some of its own shares but did not legally cancel or retire them, and thereafter resold the shares at a higher price to assist in

financing an expansion and replacement program, a circuit court held that a taxable gain had been realized by the corporation, despite the fact that it had bought the stock to accommodate the sellers and not as an investment or to make a profit.

Partnerships.—The Tax Court has ruled that a partner selling his interest to another partner is taxable on his entire distributive share of the partnership profits to the date of sale, although there was an agreement limiting prior withdrawals and the selling partner relinquished his right to part of his share of the profits, under the sale contract.

Drought Loss.—A published ruling by the Commissioner of Internal Revenue recognizes that a loss sustained with respect to residential property resulting from a long and unusual drought constitutes an allowable deduction as a casualty loss. The amount of the loss, including any trees and shrubs, is to be measured by the value of the entire property immediately before the loss, less its value thereafter (but not more than the adjusted basis of the property) reduced by any insurance received.

Closely Held Corporations.—The method for valuation of closely held stock for estate and gift tax purposes is outlined in a ruling by the Internal Revenue Service, which states in part:

The following factors are fundamental and require careful analysis in each case: (a) the nature of the business and the history of the enterprise, including the date of incorporation; (b) the economic outlook in general and the condition and outcome of the specific industry in particular; (c) the book value of the stock and the financial condition of the business; (d) the earning capacity of the company; (e) the dividend-paying capacity; (f) goodwill; (g) sales of the stock and the size of the block of stock to be valued; (h) the market price of stocks of corporations engaged in the same or a similar line of busi-

ness which are listed on an exchange.

Public Contracts

Renegotiation.—Government contractors and subcontractors with fiscal years beginning in 1953 and ending in 1954 have been granted an indefinite extension of time by the Renegotiation Board for filing financial reports for such year. Notice of the extended date for filing will be given after final action has been taken on pending legislation to extend and amend the Renegotiation Act of 1951.

On the matter of minimum refunds, the Renegotiation Board has announced as its policy, in the absence of unusual circumstances, that no determination of excessive profits will be made if such excessive profits (before adjustment for state taxes measured by income) amount to less than \$10,000 with respect to a fiscal year ended on or before December 31, 1951, or less than \$20,000 with respect to any fiscal year ended after December 31, 1951.

Minimum Wage Rates.—The Supreme Court has decided that the schedule of minimum wage rates included in a government construction contract, as required by the Davis-Bacon Act, is not a representation or warranty of prevailing wage rates in the contract area. In so ruling, it reversed a court of claims judgment against the United States in favor of a contractor for the difference between the schedule of minimum wage rates as set forth in a construction contract and the higher rates which the Secretary of Labor later found to be prevailing in the area.

Escalator Clause.—In an opinion by the comptroller general, the government's acceptance of delivery after a contract performance date was held not to have resulted in any liability on its part, under a standard steel escalation clause, for an increase in the price of contractor's materials which became effective after the contract performance date but before actual delivery.

INSULATED METAL WALLS

for SCHOOLS and INSTITUTIONAL BUILDINGS
ALUMINUM, STAINLESS or GALVANIZED STEEL



FLUSH, RIBBED, or FLUTED
Over-all "U" Factor of Various Types is Equivalent
to or Better than Conventional 16" Masonry Wall

The modern school building illustrated below is another excellent example of architectural design effects obtainable with Mahon Insulated Metal Walls in combination with brick and other materials. In this particular building, Insulated Metal Wall Panels, with Stainless Steel exterior plates, were employed for curtain walls in spandrel areas with glass block in the upper part of window openings below. The architect has achieved an unusually attractive over-all appearance with the lasting beauty and permanence of Stainless Steel. The advantages of Insulated Metal Walls, however, are not confined to design effects obtainable . . . important building economies are realized through lower material cost, lower labor cost, and the accumulative advantages of reduced construction time resulting from rapid erection. Buildings can be quickly enclosed with Insulated Metal Walls—even under extreme low temperature conditions which would preclude masonry construction. Mahon Insulated Metal Walls are available in three exterior patterns . . . the Mahon "Field Constructed" Fluted or Ribbed Wall can be erected up to sixty feet in height without a horizontal joint—a feature of Mahon Walls which is particularly desirable in auditoriums, armories, powerhouses and other buildings where high expanses of unbroken wall surface are common. See Sweet's Files for complete information, or write for Catalog No. B-54-B.

THE R. C. MAHON COMPANY

Detroit 34, Mich. • Chicago 4, Ill. • Representatives in All Principal Cities
Manufacturers of Insulated Metal Walls and Wall Panels; Steel Deck for Roofs, Partitions
and Permanent Concrete Floor Forms; Rolling Steel Doors, Grilles and Under-
writers' Labeled Rolling Steel Doors and Fire Shutters.



MAHON

The 35th A.G.C. Annual Convention

» THE 35th annual convention of The Associated General Contractors of America, held in Los Angeles, California, March 1 to 4, 1954, was the largest and one of the best in association history.

The holding of such a meeting, which brings to one place leading general contractors from all parts of the country, inevitably draws attention to the size of the construction industry and its importance not only to a strong national economy but also to the stability of a free world.

At this particular time when the economy is undergoing an adjustment and businessmen, economists, government officials and all citizens are trying to guess what the future holds, it was encouraging that a sound spirit of optimism for the immediate and the long-range future dominated the convention.

There was pointed out to the convention the fact that now there is an atmosphere in government which is favorable for the further development of business and industry, which in turn leads to more and better products and services for the country, more jobs for people, and a higher standard of living.

Although the construction industry for the past several years has been establishing new all-time records for the volume of work put in place, there have been, are and will be developing even greater needs for physical facilities to care for the needs of a growing population and an ever-expanding national economy.

Those attending the convention once again recognized that the competition which is becoming even keener in the industry, and which may be disastrous to some firms, is an integral part of the economic system for which contractors stand and is one of the means by which the public secures maximum value for its investment in construction.

The contributions which the industry has been making in past years to the national defense and to the growth and development of the nation and its communities, also serve to illustrate the responsibilities which the industry has to carry out its work promptly and with a maximum of efficiency and economy.

As the nation grows larger and as its economic system becomes more complex, there is a greater need for information about how the economy is developing, for understanding of how the industry can best fit into the developments, and for coordinated action by members of the industry.

The discussions and actions of the convention developed further the means by which the association, nationally and locally, can serve as the medium for the interchange of essential information and for the coordination of action in the common good.

The national association was able to report that its facilities were further improved during the year, and that once again positive and constructive action was taken on all the major problems facing the industry. And it reported that work which it was doing and experience which it was accumulating would enable the association to be of greater value to its members in the future.

The A.G.C. was founded in 1918 with 97 members upon the principles that industries and individuals, in order to retain the benefits arising from free initiative, themselves should accept responsibility for fair and intelligent self-government and should discharge their obligations to the public to the best of their abilities.

Through the years the many men who have been members of the association, or who have served as officers, directors, members of the Advisory Board, chairmen or members of committees, officers of chapters, members of chapter or national staffs, or in other capacities, have done a tremendous volume of work which has been of benefit to members and the industry. The effects of their constructive actions and the benefits of their wisdom have been steadily accruing to the benefit of A.G.C. members.

Each year it has become more notable that the A.G.C. has taken advantage of the accumulated experience and accomplishments to broaden its horizons so that its work nationally and locally continues to increase in volume, in effectiveness, and in value to its members and the public.

Practically all of the editorial pages of this issue of the magazine are devoted to reporting the discussions, addresses, and actions of the convention. Even so, there were so many meetings of committees, joint cooperative committees, divisions, chapter presidents, chapter managers, and others which were devoted to ways of bringing about improvements in the industry's ability to perform its work, and there was so much vital information imparted in the addresses that the reports here are only summarized and highlighted. The volume of work done by the convention was too great to report in complete detail.

There was ample evidence at the 35th annual convention that A.G.C. members assume conscientiously their responsibilities to constantly work for improvements in the construction industry so that it can discharge its obligation to the public with skill, integrity and responsibility.



Isabella Dam shows the main dam, lower left, and auxiliary dam at right. Granite hill between the two units has outlet tunnel passing through it and spillway over it. Canal feeding from auxiliary dam supplies a power company with water to turn turbines.

2,900,000 cu. yds. of fill moved quickly on Isabella Dam

**CAT* equipment and one of the largest rippers ever
built team to build a dam to control the Kern River**

Isabella Dam, 1,725 feet in length and 185 feet high, is ready to tame the unpredictable Kern River in California. Its completion relieves Bakersfield of the menace of floods and brings promise of greater irrigation to the lower San Joaquin Valley.

The idea was to regulate the Kern, a river of extremes. Its annual flow varies from 1,900,000 acre-feet to as little as 185,000. To do the job Isabella Dam is divided into two sections: the main dam consisting of 2,900,000 cu. yds. of fill; the auxiliary dam, 100 feet high, 3,325 feet long with 1,800,000 cu. yds. of fill. Separating the two is a hill

of granite, through which has been holed the 800-foot main outlet tunnel, and over which passes the spillway.

Macco Corporation, Morrison-Knudsen Company Inc., and River Construction Corporation were awarded a \$5,873,782 contract for constructing the main dam, completing the auxiliary dam, realigning a section of the canal and building a spillway. They enlisted the aid of a fleet of dependable, swift Caterpillar* machines to do the job which was designed and supervised by the Sacramento District, Corps of Engineers, U. S. Army.

The 2,900,000 yards of fill for the

main dam was decomposed granite. Using Cat DW20 Tractors and matching Scrapers, the contractors hauled a daily average of 25,000 cu. yds. over a distance of 4,000 feet in two 9-hour shifts.

The material was broken up by rippers, including one of the largest rippers ever built. Aluminum irrigation pipe was laid across the broken area. The material was sprinkled for several hours, sometimes as much as 48 hours, after which it was picked up by earth-eating DW20 Tractors and Scrapers. Compaction was obtained by a 50-ton Southwest rubber-tired tamper pulled by a



CAT DW20 AND SCRAPER hauls part of the 2,900,000 cu. yds. of fill needed for the main dam. Contractors used a fleet of DW20s on the job, along with D8s, No. 12 Motor Graders and D13000 Engines. With a haul distance of 4,000 feet, the DW20s carried a daily average of 25,000 cu. yds. in two 9-hour shifts per day. Most of the fill was decomposed granite.

DW20. Working in conjunction with the tamper was another DW20 pulling an 18-foot offset disk.

Rugged Caterpillar equipment entered into every phase of the job. In all, the contractors made use of fourteen DW20s with Scrapers, three DW20s with plows and compactors, eight D8s, two No. 12 Motor Graders and D13000 Diesel Engines to power Gardner-Denver compressors.

From experience these contractors know the dollar-saving advantages of standardizing on Caterpillar equipment. Through this wise standardization, their operators and mechanics become familiar with one make of equipment. There is no need to carry a stock of parts. Many parts on Cat Engines are interchangeable—and service from your well-stocked Caterpillar Dealer is prompt.

Why not have your Caterpillar



THREE CATERPILLAR UNITS work together on the auxiliary dam. Widening and raising the fill are a DW20 pulling a 50-ton tamper, a DW20 pulling an offset disk and a third DW20 spreading fill for the job.

Dealer demonstrate the equipment that will do your job quicker and cheaper? Discover for yourself the reasons why the machines you see on the toughest jobs are always Caterpillar yellow.

CATERPILLAR TRACTOR CO., PEORIA, ILLINOIS

*Both Cat and Caterpillar are registered trademarks—®



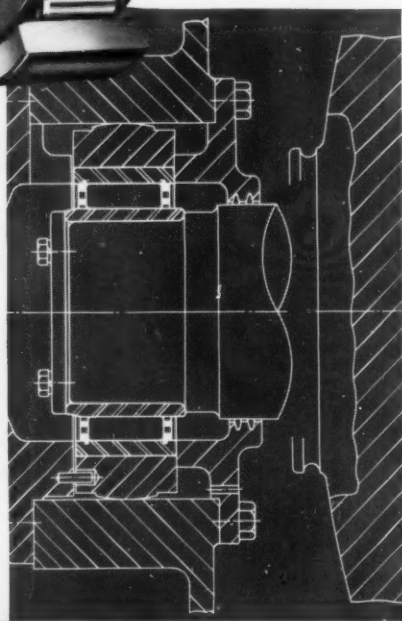
A CAT NO. 12 MOTOR GRADER finishes the bottom of a canal while D13000 Diesels power Gardner-Denver 500 compressors on top of bank. Graders also maintained haul roads.

Is shaft expansion a problem?

**HERE'S
HOW
HYATTS
HELP...**



Hyatt Hy-Loads are available in separable outer race, separable inner race or non-separable construction.



Check the drawing at the left. The bearing is a Hyatt Hy-Load, and because the inner race is cylindrical, the shaft it supports is free to move axially—thus allowing for shaft expansion without cramping the bearing or distorting the shaft. Obviously, this is only one of many ways in which Hyatt bearings can be used to reduce costs as they reduce friction, but it's a good example of why so many designers throughout industry keep their Hyatt catalogs within easy reach.

For further details write for Catalog 150 or call your nearest Hyatt representative.

HYATT

STRAIGHT 

BARREL 

TAPER 

HYATT BEARINGS DIVISION • GENERAL MOTORS CORPORATION • HARRISON, NEW JERSEY

ROLLER BEARINGS



John MacLeod, left, of Paramount, California, receives the gavel symbolizing the A.G.C. presidency for 1954 from retiring President C. P. Street, of Charlotte, North Carolina

**The biggest news in the construction industry last month—
which exerted a heavy impact on the over-all picture of the
national economy—was generated by the
35th Annual Convention of The Associated General Contractors
of America in Los Angeles, March 1-4.
The following pages depict the major highlights of this event.**

Optimism Keynotes Convention as A.G.C. Acts on Industry Needs

- More than 1,800 Registered at Largest Meeting
- Actions in Public's Interest; Good Year Seen

» A SPIRIT of optimism for the immediate and long-range future dominated the 35th annual A.G.C. convention in Los Angeles March 1-4, both in addresses by leaders from government, business and labor, and in forward-looking actions taken by working committees, division meetings and the convention which were dedicated to the best interests of the public and the industry.

More than 1,800 from every state of the Union and Alaska registered for the largest convention in A.G.C. history to consider how the industry can best continue its dynamic role in the national economy of contributing to the rising standard of American living. The association represents more than 6,500 leading construction firms throughout the country and Alaska who perform the majority of the nation's contract construction of all types at home and abroad.

Among the progressive actions taken by the convention were resolutions recommending advance planning of public works projects and procedures to safeguard public funds in carrying them out, urging labor-management coopera-

tion in the best interests of the public, recommending an adequate highway program, encouraging improved relations between general contractors and subcontractors, and endorsing the President's proposal for liberalized tax

OTHER CONVENTION STORIES

Resolutions	36
Installation of officers	38
Committee reports	43
Keynote address	50
Admiral Perry's address	54
Gen. Chorpene's address	55
Oechsle address	59
Gordon address	61
Gray address	64
Secretary Mitchell's address	69
A.P.W.A.-A.G.C. committee	76
Heavy-Railroad Division	75
Dexheimer address	78
Highway Contractors' Division	82
Johnson address	86
N.A.S.A.O.-A.G.C. committee	84
Building Contractors' Division	89
Apprentice training report	93
Public relations report	95
Equipment committees	99
Accident prevention report	103
Secretaries-Managers Council	109

treatment of depreciation to encourage new investment, increased production and improved standards of living. (Full text of resolutions is on pages 36-37.)

Unanimous agreement that the economic outlook, particularly for the construction industry, is good for 1954 and the future was noted by speakers from industry, labor and government. As a backdrop to the economic discussion the association reported results of its recent survey of current conditions and prospects for the next six months which indicated a heavy spurt in highway construction, a moderate gain in building, a decline in heavy engineering projects, and increasing competition among contractors for jobs (March CONSTRUCTOR, page 21).

New Officers Installed

John MacLeod, head of the Macco Corporation, Paramount, Calif., a noted heavy construction firm, was inducted as 1954 president, succeeding C. P. Street, McDevitt & Street Co., Charlotte, N. C.

George C. Koss, of the Koss Construction Co., Des Moines, one of the country's largest constructors of highways and airports, was installed as vice president for 1954, succeeding Mr. MacLeod who held that position in 1953.

William Muirhead, Wm. Muirhead Construction Co., Durham, N. C., was reelected secretary-treasurer by the association's Board of Directors.



1954 officers of the A.G.C. get together at the convention: Left to right, Managing Director H. E. Foreman, Washington, D. C.; retiring President C. P. Street, Charlotte, N. C.; incoming President John MacLeod, Paramount, Calif.; Vice President George C. Koss, Des Moines, Iowa; and Executive Director James D. Marshall, Washington, D. C.

The convention also installed 44 new directors recently elected by the association, and the Board of Directors approved the appointment of 33 members to the Advisory Board (see page 38).

Eisenhower Greets Convention

The convention was welcomed in addresses by William E. Irish, president of the Southern California Chapter, and Los Angeles Mayor Norris Poulson, and by messages from Los Angeles County officials, California Governor Goodwin Knight, and Richard M. Nixon, Vice President of the United States.

President Eisenhower, in a message of greeting, stated in part:

"My congratulations go to all of you for the remarkable construction record which your industry set in 1953. I know you are aware that our expanding population and our rising standard of living require that another high level of construction be achieved this year. I am confident that it will be done."

Industry Responsibility Cited

President Street, in opening the convention, cited "solid evidence of our nationwide strength . . . We are working together at the local levels and are doing a fine job for our industry. I can not believe and know otherwise than that we are growing, not only in numbers, but in determination and ability to build this industry."

The tremendous growth of the construction industry, and the association, has placed increasing responsibilities on the organization and individual general contractors, Mr. Street asserted. He concluded that "if we truly act as general contractors, we can have no fear as to the future of our place within the industry." (Text of address begins on page 34.)

Annual A.G.C. Report

In presenting the annual report, Managing Director H. E. Foreman, Washington, D. C., stated his belief that the past year "has been the A.G.C.'s finest year—the year of greatest construction activity, greatest membership, and a year of sound financial structure. The A.G.C. has made its progress because it has held to principles, and not yielded to expediency."

The report cited the record total of \$46.5 billion of construction put in place in 1953, consisting of \$34.8 billion in new construction and \$11.7 bil-

lion in maintenance and repairs, and noted that 1954 promises to be another year of high construction volume. All the major actions taken by the association on behalf of its members, the industry and the public since the last convention in March 1953 were outlined in the annual report (printed in full in March CONSTRUCTOR).

James D. Marshall, executive director, in describing the operations of the national and chapter staffs, noted that general contractors "are the most aggressive competitors in existence in any business," and stated that the staff's concept of its work was to provide continuity and seek objectives in a manner that would interrupt business operations of members as little as possible.

Mr. Marshall cited the contributions of current and past officers of the A.G.C. who "possess the greatest talent in the entire world in this construction industry," and also the guiding work of A.G.C. committees and joint committees with other associations in the industry.

Optimistic Economic Outlook

Strong optimism for the construction industry and business generally during 1954 was expressed unanimously by five top leaders in government, business and labor who addressed the convention on the economic outlook.

Contrary to recent expressions of concern in some quarters over the possibility of a continuing slump in business, these speakers forecast good business conditions for this year—the second best in history, exceeded only by 1953. After this year the consensus was that a rise to new heights of productivity and living standards will begin.

In the construction field, predictions were that 1954 will almost equal the all-time record volume of \$46.5 billion in 1953, if it does not fully match or even surpass that mark.

A joint survey of building plans for 1954 conducted by the Departments of Labor and Commerce produced the estimate that new construction this year will total \$34 billion, 2 per cent below the 1953 record. The speakers on the economic outlook agreed that this forecast would be borne out, and possibly exceeded.

Summaries of their forecasts follow:

Clifford F. Hood, president, United States Steel Corporation—The brightest picture in the economic outlook centers around the estimate of \$34 billion in new construction expenditures this year, and if the estimators are off in their calculations as they were in 1953, this figure could well approach \$36 billion. Great and positive forces are building up. A whole new concept of living is emerging from the laboratories and coming off the drawing boards. The needs of our increasing



William E. Irish, left, president of the Southern California Chapter, and Mayor Norris Poulson, of Los Angeles, welcomed A.G.C. members to the convention.



C. S. Embrey
Assistant Executive Director

population indicate tremendous potentials. The growing movement of people to the suburbs means the creation of new communities with all their facilities. Redevelopment of cities is increasing. (Details on page 50.)

James P. Mitchell, Secretary of Labor—This will be another banner year in the construction industry, the second best on record. There has been some reduction in activity in the nation's economy as a whole, but this is part of a necessary readjustment. A slight but not significant increase in unemployment may take place in the next two months, and after that for a few months conditions will remain at that level, followed by the beginning of an upward climb to new heights of employment, incomes, security and living standards. The country is not going from boom to bust.

Regarding predetermination of prevailing minimum wage rates on federal construction projects under provisions of the Davis-Bacon Act, Secretary Mitchell stated: "I assure you that while I am Secretary of Labor, the program will be administered fairly and objectively. The cardinal principle guiding us in the administration of the Act will be: we shall determine rates *actually* prevailing in the areas for the type of work involved." (Full text begins on page 69.)

Carl F. Oechsle, Deputy Assistant Secretary of Commerce for Domestic Affairs—This will be an exceedingly good business year, second only to 1953. The construction industry, one of the basic sustainers of our economy, will have a production volume almost as large as last year's, and recent surveys indicate that earlier forecasts of

new construction may be exceeded. There has been a slight contraction in over-all business activity since the middle of 1953, but the downward movement has centered in the manufacturing industries, largely due to a shift in the rate of accumulation of goods for inventory. Inventories have been declining since the last quarter of 1953. Meanwhile, total consumer spending has not changed materially. (See Economics, page 59.)

Robert L. Gordon, vice president, Bank of America, Los Angeles—A healthy readjustment in economic activity will take place this year, but nothing like a major depression or even a serious recession. None of the speculative conditions of 1929 exist today. Business has been prepared for a readjustment and is not going to be taken by surprise by any recession. The present state of business psychology is one of cautious optimism, which is needed for a sound economy. Forces underlying the nation's economy include continuing high government spending, huge backlogs of needs for highways and schools, continuing high volume of construction, and requirements for new production equipment, which could be a tremendous

source of new business activity. (See Economics, page 61.)

Richard J. Gray, president, Building and Construction Trades Department, American Federation of Labor—For the construction industry 1954 will prove to be close to if not the best year our country has ever enjoyed. This may depend on the speed with which Congress enacts pending legislation to carry on the many programs which are needed throughout the country, including construction of roads, schools, hospitals, housing in all its forms, slum clearance and urban redevelopment projects, defense projects, reclamation developments, and public power projects. (See Economics, page 64.)

Speeches on Public Works

Four other convention speakers discussed various aspects of public works. Summaries of their remarks follow:

Brig. Gen. C. H. Chorpene, Assistant Chief of Engineers for Civil Works, U. S. Army—The nation needs a greater development of its water resources. Population is growing rapidly, and adequate development of water resources is of paramount importance in maintaining a dynamic, expanding economy. The conflict between the need for development and the need for governmental economy has resulted in postponement of many worthwhile projects. The Corps of Engineers has recommended that consideration be given to enlarging the base of civil works by initiation of a number of badly needed smaller projects. The Bureau of the Budget and the President have accepted this sound principle, which should give new impetus to civil works. (See National Defense, page 55.)

Rear Admiral J. R. Perry, Chief, Bureau of Yards and Docks, U. S. Navy—One of the most useful and inspiring developments of our economy has been the evolution of the American contractor as a professional man of great importance to our national community, of high integrity and the strictest sense of moral values. These values are highly important in relationships between contractors and contracting officers. Contractors are entitled to sympathetic understanding and help, when needed, on the part of contracting officers. The contractor and the contracting officer can constitute a hard-driving team which will safeguard the interests of the public and make a major contribution to pros-

In Memoriam

The 35th A. G. C. convention paused to honor the memory of members who died during the preceding year.

A special memorial honored Past President Adolph Teichert, Jr., who died last May 5th in Sacramento after a long illness. It was presented by Past President Walter L. Couse, of Detroit.

Mr. Teichert, who had been chairman of the board of A. Teichert & Son, Inc., which was founded by his father in 1878, ended a notable construction career at the age of 68. He was the 30th president of the association, a past president of the Northern California Chapter, and in addition to many A.G.C. activities, participated in other trade, professional and civic work. His firm became a leader in highway, heavy and railroad construction in the West.

The convention also expressed the association's sense of loss over the deaths of members during the past year and instructed the national office to inform their families of its action.

perity and security. (See National Defense, page 54.)

A. E. Johnson, president, American Association of State Highway Officials (addressing the Highway Contractors' Division)—The solution to our highway dilemma lies in education—letting the user know how much it costs not to have adequate highways, how much an adequate system will cost, and letting the people decide how much highway program they wish to buy. The cost of over-all needs on roads and streets is about \$50 billion. In case of need for an emergency public works program, highways would receive special recognition. An accelerated and enlarged highway program is a sure thing in the not too distant future. (See page 86.)

Wilbur A. Dexheimer, Commissioner, Bureau of Reclamation, Department of the Interior—Money spent on reclamation projects must be paid back to the government by the users, and the repayment record is good. Population in the West is growing rapidly, and economic expansion there is entirely dependent on water supply. The bureau has a great many projects which it would like to get started, including the Upper Colorado River storage project, whose cost would be a little more than a billion dollars. The bureau's policy calls for doing all its work by contract, except some emergency work and small jobs. Only 1.2% of the bureau's construction money was used on day labor last year. (See page 78.)

Occupational Divisions Meet

The Building Contractors' Division, meeting separately to consider their particular problems, discussed labor developments, apprentice training, subcontractor relationships, accident prevention and compensation insurance, Chairman Frank F. Burrows, Burlingame, Calif., reported. Officers elected for 1954 are: Chairman, Frank J. Rooney, Miami, Fla.; and vice chairman, James W. Cawdrey, Seattle. (Division actions reported on page 89.)

Actions of highway contractors, reported by division Chairman P. M. Thornton, Hancock, Mich., included recommendations of resolutions calling for adequate highway financing, increased airport financing, increased salaries for engineers in public service, and for careful predetermination of prevailing wage scales. Officers for 1954 are: Chairman, M. Clare Miller, McPherson, Kans.; and vice chairman,

J. L. Ewell, Lakeland, Fla. (Details, page 82.)

The Heavy Construction and Railroad Contractors' Division recommended resolutions calling for long-range public works planning, subcontract bidding and awarding procedures, contract construction by public utilities, opposition to day labor operations and to proposed revisions of FCC regulations on use of short-wave radios, Chairman C. W. Cunningham, Omaha, reported. Officers for 1954 are: Chairman, A. S. Macdonald, Tacoma, Wash.; vice chairman, J. A. Henderson, Winona, Minn. (Page 75.)

Committees Active

The principal committees of the association which carry out a large part of its work throughout the year held meetings during the three days preceding the opening of the convention, and made reports to the convention through their chairmen (described on page 43).

Five joint cooperative committees which the A.G.C. maintains with other organizations to consider mutual problems met in the course of the convention. They were the joint groups of the A.G.C. and: Construction Industry

A.G.C. Service Awards

A.G.C. Service Awards were made by President C. P. Street to 18 staff members of the chapters and national office at the 35th annual convention.

Those presented certificates and emblems for service from ten to 27 years were:

Martina Hyatt, Assistant Secretary, Kansas Contractors Association, Topeka, 27 years.

H. E. Foreman, Managing Director, National Office, 25 years.

Etta M. Beattie, Office Secretary, Constructors Association of Western Pennsylvania, Pittsburgh, 20 years.

Virgil J. Haggert, Secretary, Nebraska Building Chapter, Omaha, 17 years.

Berthena Jackson, Office Manager, Detroit Chapter, 13 years.

Randall C. Wyant, Secretary, Master Builders Association, Washington, D. C., 10 years.

Louise Taylor, Labor Relations Secretary, Southern California Chapter, Los Angeles, 10 years.

William M. Lees, Managing Director, New York State Chapter, Albany, 10 years.

Manufacturers' Association, Associated Equipment Distributors, American Public Works Association, National Association of State Aviation Officials, and American Association of State Highway Officials. (Actions reported elsewhere in this issue.)

Awards Presented

The Cashman Trophy, annually awarded to the chapter showing outstanding membership gains, went to the Florida East Coast Chapter, which registered a net gain of 100 per cent in 1953. Honorable mention was made of the Ohio Highway Chapter which showed a 77 per cent increase.

The annual "Constructionizing Award" was presented to Kenneth Lewis, manager of the Kansas Chapter, Builders Division. (See page 95.)

The A.G.C. Apprentice Training Activity Award was presented to Curtis Bell, Corpus Christi, managing director of the South Texas Chapter, for 1953 promotion. (Page 93.)

Many accident prevention awards were made to individual members and chapters, indicating a great increase in this activity. (See page 103.)

California Chapters Hosts

A resolution of appreciation was adopted recognizing the excellent arrangements and outstanding entertainment program provided by the host chapter, the Southern California Chapter, and the other California chapters which were cosponsors.

R. A. Smith and Spencer Webb, Los Angeles, were co-chairmen of the General Convention Committee. President of the Southern California Chapter is Wm. E. Irish, and manager, W. D. Shaw. (Details, page 46.)



Vice President George C. Koss (left) chats with Executive Director Marshall.

National staff members who handled meeting arrangements were Assistant Executive Director C. S. Embrey, Administrative Assistant C. I. Mehl, and J. C. Ellis.

Secretaries' Council

The Secretaries' and Managers' Council, with the majority of the executives of A.G.C. chapters and branches in attendance, met all day Sunday prior to the convention to consider problems of chapter operations.

Officers elected were A. H. Harding, Portland, Oreg., chairman, succeeding Robert Patten, Charlotte, N. C.; W. C. Bowden, Pittsburgh, vice chairman, building chapters' division; W. D. Shaw, Los Angeles, vice chairman, heavy and highway chapters' division; and Curtis Bell, Corpus Christi, Texas, secretary. (Details, page 109.)

The 1954 mid-year Board Meeting will be held September 27-29 at St. Louis, Mo., and the 36th annual convention, March 14-17, 1955 in New Orleans.



Frank J. Rooney, of Miami, Fla., left, receives the coveted Cashman Trophy on behalf of the Florida East Coast Chapter from Parker H. Rice, Manchester, N. H., general vice chairman of the Membership Committee, for its membership accomplishments in 1953. The chapter showed a net gain of 100 per cent during the year. President of the Florida chapter in 1953 was W. H. Arnold, Palm Beach. The executive manager is Wm. P. Bobb, Jr., Palm Beach.

Street Cites Increasing A.G.C. Responsibilities

• Must Grow with Industry; Contractor Responsibility Urged

(President C. P. Street's opening address to the 35th annual A.G.C. convention in Los Angeles, March 1, 1954, follows, in part:)

»ON BEHALF of the officers, the staff, the Executive Committee, and the California chapters, I welcome you to this our 35th annual convention. I hope that you like being here as much as I do; that you will find the business sessions profitable and the outside hours fully enjoyable. I know that I speak now for all of us in expressing thanks to our host chapters for their delightful hospitality.

For our program we are privileged to enjoy speakers of ability and distinction. Reports will be made of activities of the year. Your advice and approval will be asked for the new year's work.

Please remember that this meeting is yours. It does not belong to your officers nor the national staff. It is held for the purpose of acquainting you with the work that has been done and for developing a program of work ahead. It is expected and urged that at appropriate times, you speak to the questions presented to you and require explanations of information not fully reported to you. I want you to leave

this convention with the satisfied feeling of having contributed to the well-being of the construction industry through the organization of The Associated General Contractors of America.

Association Strength Cited

John MacLeod and I, together with Jim Marshall and others of the national staff, have had the pleasure and real privilege of visiting many chapters. The things that we saw and heard gave solid evidence of our nation-wide strength in our chapter secretaries, managers, officers, and membership. We are working together at the local levels and are doing a fine job for our industry.

I can not believe and know otherwise than that we are growing, not only in numbers, but in determination and ability to build this industry. I am proud to be one of those numbered as a member of A.G.C. This is a big and powerful organization. I wonder occasionally whether we recognize our own strength. I also wonder whether we are using this strength.

Not only are we strong in our chapters and branches, but we are strong, too, with our national staff. Through Managing Director Doc Foreman, Executive Director Jim Marshall, and

the heads of our divisions and departments, we have functioning one of the best, if not the best, trade association organization in the entire country. Your Executive Committee has commented on this frequently and I now report to you that in this you have a fact in which every segment of our association may take pride. Because these organizations are of the best, I believe that it can be said that our organization work is likewise of the best.

Staffs Provide Continuity

Through this national staff and through the staffs of chapters and branches, we are provided continuity for the work of A.G.C. Chapter and national officers, of which I happen now to be one, are like a flash in the pan. We are here today and gone tomorrow. These organizations which have so faithfully served us for decades will continue to carry the ball.

I invite your attention to the fact that our association work has truly become big business. The responsibilities of our national and chapter organizations have increased in keeping with the tremendous growth of our industry. The reorganization of our national staff in keeping with their greatly increased work load and responsibility has continued to progress quite satisfactorily this year.

I thank Doc Foreman, Jim Mar-

shall, Charles Embrey, and all those leaders within the national staff and within your chapters and branches, for the whole-hearted cooperation which has been given to me and the Executive Committee during the year just passed.

Committees Provide Groundwork

I thank, too, the chairmen and members of those national committees of whom so much work has been required this year. I will not attempt to mention all of the committees because you will hear reports of many of them. Particularly, however, I thank those 14 men who make up your Executive Committee. The work they have done is of the greatest importance and they have been faithful in their tasks assigned in every respect. Their attendance at every meeting no matter what the distance, has been almost 100% perfect.

In these committees, the real ground work of the national program is done. They carry out your instructions to the best of their ability. They study the possibilities of future needs and make reports to you for your approval or correction. There are literally hundreds of men working on these committees, interesting themselves completely in developing the best interest of the construction industry.

Just about a year ago great changes occurred in national and international affairs. Naturally, a new President, of a party out of power for 20 years, came into office. Internationally, the greatest individual power of the enemy world died and new faces have shown to replace him. Not yet do we know the full import of these things on our industry or the world. We have had some information about the trend of things nationally and you will hear more of this in reports to come before you at this convention. I like the trend. We are hopeful that internationally the event will have caused greater likelihood for peace. If we may hope for peace, and, if we may expect a curtailment to some extent of federal spending, we may look for a return to conditions more nearly like those before 1942.

Construction's Place in Economy

We have had in 1953 the greatest construction year of all time, with a total volume of construction of all kinds valued at more than 46 billion dollars. Our industry should feel a great weight of responsibility when we

realize that in the construction of these physical facilities necessary for America's progress, more than one dollar out of every eight invested in goods and services throughout the nation was invested through construction, and that directly and indirectly the industry brought about the employment of about 15 per cent of the workers of the country.

What happens in the construction industry is of vital significance to the entire national economy, and to the world as well. A vigorous construction industry is essential to a vigorous national economy, and a strong United States is now essential to the peace and stability of the world.

1953 succeeded several consecutive years of continuing increases. Possibly, 1954 will show a small reduction in construction dollar volume, but I believe the growth of population in this country and the great backlog of needed construction of all kinds arising out of those years of restrictions assure that we can continue to look forward to a tremendous construction volume for many years to come.

One aspect of these changes in our national and international affairs, has been the increased competition in evidence everywhere. From New England to California and from Florida to Seattle, the report is consistently that bidding is cheaper than at any time since the late '30's. It appears certain that many jobs are being bid at less than cost, with the inevitable result that someone must take a loss.

With this immense volume of construction, it is almost inconceivable that we should give such evidences of panic. It is well time that we take stock of ourselves and of our ability to do work. Jobs should be bid based on known costs plus a reasonable profit.

Adjustment to Changing Needs

One fact stands out for me after a year in the office which I am now ending. We have grown and our growth has not been to the same pattern everywhere. Transportation facilities have become revolutionized almost overnight. Contractors are no longer confined to the limited territory of their counties or state. Tremendous construction companies have developed with interests not always parallel to the majority of our membership. While these immense changes within our industry have been taking place, the pattern of our adjustment to them

has been somewhat like patchwork on an old quilt.

Our Governing Provisions and Rules of Procedure, while likely suited to the time of their adoption, now do not take care of the problems of these changes. I am convinced that, whether we can solve these problems completely or not, we need to change our thinking. We need to continue to hold together within one organization contractors of all localities and of all sizes and of all kinds. We will weaken ourselves and the industry if this is not done. To that end, the Governing Provisions Committee by request of the Executive Committee and by approval of the board meeting in Chicago last September is working toward a complete rewriting of the Governing Provisions and Rules of Procedure.

This is not a work to be done rapidly. It is not ready for submission to you at this meeting. Detailed information on this subject will come to you in later reports, but I ask you to remember that we need within our organization to make changes that will aim themselves toward the solving of these problems arising out of our growth and out of our revolutionized transportation facilities.

Contractor's Responsibility Cited

From many persons I have heard suggestions to the effect that general contractors are not living up to their responsibilities. Although the industry is as old as civilization itself, the general contractor is relatively new. Persons who have our best interest in mind have challenged the attitude with which many of us accept our one-contract responsibility. We are challenged that we do not supervise and coordinate our subcontractors, that we do not properly order, expedite, and coordinate our materials and that we do not thoroughly supervise our contract obligations.

It has been suggested, and I believe it to be true, that the worst enemy which we as general contractors have is our own indifference to our full responsibility. I bring this thought because I believe that if we truly act as general contractors, we can have no fear as to the future of our place within the industry.

You are to be congratulated that in the year to come you have chosen for your leader, John MacLeod. Under his guidance I am looking forward to one of the best years A.G.C. has ever had.

Actions of the 35th Annual A.G.C. Convention

Construction by Contract

The general contractors of the nation can report to the public that now, more than ever before, the construction industry has the expanding capacity to carry out construction operations promptly and efficiently.

For that reason the 35th annual convention of The Associated General Contractors of America, held in Los Angeles, March 1-4, 1954, recommends to all private investors in construction, to agencies of the federal, state and local governments, and to public and quasi-public utilities that they carry out their construction programs through the regular channels of the industry.

Because public funds are safeguarded when public works projects are executed by contract, it further recommends that all federal, state and local public works contracts be awarded to the lowest responsible bidder after public advertisement.

Because maximum efficiency is achieved when complete responsibility for construction of a project is centralized in a competent general contractor, it further recommends that one over-all contract be awarded for construction of the project, or its major portions, and that the general contractor furnish all materials and equipment necessary.

Advance Planning

A vigorous national economy and the growth and development of the nation and its communities requires the continuing construction of projects which fulfill a public need but are not within the scope of private investment.

Defense or war requirements, a growing and shifting population, and other causes have brought about tremendous backlogs of demand for the construction of schools, highways, water facilities, and other projects which are needed now and will be needed in the future.

These projects can fulfill their requirements more exactly, and their construction can be executed more economically, if they are soundly planned in advance. If planned in advance, the construction of such needed projects could be accelerated in the event of serious declines in private investment in construction.

For these reasons, the 35th annual convention of The Associated General Contractors of America, held in Los Angeles, March 1-4, 1954, recommends that the federal, state, and local governments undertake vigorous programs of making the surveys, drawings and specifications necessary for their urgently needed projects.

It further recommends that the Congress accept the recommendation of the President to make federal loans available to assist state and local governments in their public works planning where necessary.

Day Labor Operations

The 35th annual convention of The Associated General Contractors of America, held in Los Angeles, March 1-4, 1954, again condemns the force account or day labor construction operations of federal, state, or local government agencies because:

1. They do not provide adequate safeguards for the expenditure of public funds.
2. Comprehensive and accurate cost records are not open to public inspection.

3. They have a disruptive effect on the wage rates and working conditions actually prevailing in the private construction industry in the vicinity.

4. They do not take advantage of the economies, or provide the safeguards for the expenditure of public funds, possible when public works contracts are awarded to the lowest responsible bidder after public advertisement.

It supports in particular the action taken by the association in February in recommending to Congress that no part of any appropriation for the Tennessee Valley Authority shall be available for construction work by force account, except for management and operation, maintenance and repairs, engineering and supervision, routine minor construction work, or in case of emergencies, local in character, so declared by the board of T.V.A.

Labor-Management Relations

The 35th annual convention of The Associated General Contractors of America, held in Los Angeles, March 1-4, 1954, recognizes that sound labor-management relations in the construction industry requires the cooperation of labor and management with government participation limited to the protection of the public interest. It recognizes also the need of understanding and support of the public for actions which are taken in its interest.

It recognizes further that in order for the industry to carry out as promptly and efficiently as possible its work which is fundamental to the national welfare and the development of the nation's communities, for the industry to help combat further inflation and to do its part in stabilizing the national economy, and for it to hold construction costs in line with the costs of other services and commodities, this cooperation and support is essential.

The association believes that, generally, the wages paid in construction have increased commensurately with increases in the cost of living and labor's contribution to productivity. The convention recommends specifically:

1. That labor and management avoid further unwarranted increases in wage rates.
2. That labor and management avoid the adoption of welfare plans not suitable to the industry and which cannot be administered fairly and equitably for the workers.
3. That the Secretary of Labor, in predetermining the minimum wages for federal construction projects, maintain the historic differentials which have been recognized between building construction and highway and heavy construction, and give realistic consideration to the wage scales which are actually paid and prevailing in the locality.
4. Recognizing the efforts which the present Secretary of Labor has made along this line, the association urges that these efforts continue to the end that just and reasonable administration of the Davis-Bacon Act, as written by Congress, is obtained.
5. Opposition to any federal law which would impair or supersede labor legislation by the several states.
6. That general contractors in carrying out projects abide by the wage rates and working conditions established for the area, avoid actions which would disrupt bargaining by the recognized collective bargaining group while it is being carried on, and point out to their clients the benefits to the industry and the public of keeping conditions in the industry stabilized.

Bidding and Awarding Procedures for Subcontracts

As a further step toward improvement of the procedures for the receipt of bids and the award of subcontracts by general contractors, and improvement in the relationships between general contractors and subcontractors, the 35th annual convention of The Associated General Contractors of America, held in Los Angeles March 1-4, 1954, hereby:

1. Encourages A.G.C. chapters to adopt programs, in cooperation with local associations of subcontractors, in subscribing to the *A.G.C. Code of Ethical Conduct* for bidding and awarding of subcontracts, and purchase of materials and supplies.

2. Endorses the development and adoption of suggested A.G.C. Invitation to Bid Forms, based upon the *A.G.C. Code of Ethical Conduct*, which general contractors may use or adapt in principle to their own use in inviting bids for subcontracts. The officers and Executive Committee are authorized, upon recommendation of the appropriate A.G.C. committees, to adopt the suggested forms and have them distributed for the information of members and chapters.

3. Encourages A.G.C. chapters to establish committees, which may invite participation by representatives of local subcontractors' associations appropriate to a particular case, empowered to hear charges of violation of the code and to make findings of fact.

4. Authorizes the officers and Executive Committee to undertake such cooperative actions with national associations of subcontractors as they deem appropriate in helping to establish and maintain better relationships between general contractors and subcontractors.

Subcontractors Legislation

The Associated General Contractors of America, at its 35th annual convention in Los Angeles March 1-4, 1954, reaffirms its previously stated opposition to legislation that has been proposed to the Congress which would require general contractors to name in their bids on federal public works projects their proposed mechanical specialty subcontractors and the amounts of their offers.

The bills proposing a "Federal Construction Contract Act" would be contrary to the public interest, would not accomplish their alleged purpose, would decrease competition for subcontracts, and deal with a matter of business ethics which can be handled effectively only through action of responsible groups in the industry.

Judicial Review

The Associated General Contractors of America, at its 35th annual convention in Los Angeles March 1-4, 1954, reiterates its previous statements urging the Congress of the United States to enact legislation, now under consideration, which will establish by law, beyond the possibility of doubt, the fundamental principle of American justice that the parties to a contract with the federal government have the right of judicial review of disputes which arise.

Highway Financing

The national problems resulting from an inadequate highway system are receiving growing recognition by the President of the United States, the Congress, and the public.

In order to carry out the needed improvements most effectively and economically, The Associated General Con-

tractors of America, at its 35th annual convention in Los Angeles March 1-4, 1954, recommends that:

1. The federal government assume its proper responsibility for the nation's highway needs by increasing federal-aid returns to the states of not less than \$900,000,000 annually, as recommended by the American Association of State Highway Officials.

2. The federal-aid highway construction program be administered through present channels, and that any federal-aid legislation, as finally enacted, emphasize the necessity for accomplishing this and succeeding programs by the contract method, in the best interest of the public.

3. There should be no diversion to other purposes of tax funds collected from highway users by any unit of government.

Air Transportation Facilities

Because of the importance of the expanding air transportation to the national economy and the national defense, the 35th annual convention of The Associated General Contractors of America, held in Los Angeles, March 1-4, 1954, recommends that appropriate federal, state and local governments give serious study to the adequacy of construction programs of civilian airports and air navigation facilities.

Salaries of Engineers

The necessary planning and construction supervision of the vast backlog of public improvements needed today and in the future requires that adequate staffs of engineers be maintained by state and local governments.

Lack of adequate engineering staffs can result in delay of urgently needed facilities, poorly planned projects, and uneconomical construction methods.

The 35th annual convention of The Associated General Contractors of America, meeting in Los Angeles March 1-4, 1954, again recommends that its chapters and members cooperate with the American Society of Civil Engineers and other engineering societies in seeking salary scales for engineers in public service which are commensurate with their responsibilities. This is necessary to attract and maintain staffs of competent and trained personnel to administer the expanding construction programs.

Apprentice Training (See page 93)

Change Orders and Disputes

In order that federal projects may be completed promptly and economically, the 35th annual convention of The Associated General Contractors of America in Los Angeles, March 1-4, 1954, recommends that government agencies and general contractors cooperate fully in handling expeditiously any change orders or disputes that may arise in connection with their contracts.

Radio Communications (See page 75)

Liberalized Depreciation of Structures

The 35th annual convention of The Associated General Contractors of America, held in Los Angeles, March 1-4, 1954, reaffirms a previous recommendation of the association, and endorses the recommendations made to the Congress by the President of the United States that the tax treatment of depreciation of buildings, together with equipment and machinery, be liberalized in order to encourage new investment, increased production and improved standards of living.

A. G. C. Installs 1954 Officers at Convention

• MacLeod, Koss Head Slate; Advisory Board Named

» JOHN MACLEOD, Macco Corporation, Paramount, Calif., assumed the presidency of The Associated General Contractors of America at the Los Angeles Convention last month, and George C. Koss, Koss Construction Co., Des Moines, Iowa, became vice president for 1954.

Past President William Muirhead, Muirhead Construction Co., Durham, N. C., was re-elected secretary-treasurer by the post-convention meeting of the Governing Board.

Executive Committee Named

The New Executive Committee, approved by the Governing Board of directors, is as follows:

President John MacLeod.
Vice President George C. Koss.
Arthur S. Horner, Denver, Colo.
A. S. Macdonald, Tacoma, Wash.
Glen W. Maxon, Dayton, Ohio.
M. Clare Miller, McPherson, Kans.
Frank J. Rooney, Miami, Fla.
Fred I. Rowe, Columbus, Ohio.
R. A. Smith, Los Angeles, Calif.
C. P. Street, Charlotte, N. C.
P. M. Thornton, Hancock, Mich.
Arthur H. Wells, Chicago, Ill.

W. Murray Werner, Shreveport, La.
D. W. Winkelman, Syracuse, N. Y.

New Directors Installed

Forty-six directors were installed, as follows:

Fred Birch, Great Falls, Mont.
James W. Cawdrey, Seattle, Wash.
D. L. Cheney, Seattle, Wash.
W. Ray Rogers, Portland, Oreg.
Fred H. Slate, Portland, Oreg.
J. A. Thompson, Inglewood, Calif.
E. J. Maupin, Jr., Fallon, Calif.
Marshall J. Wylie, Albuquerque, N. Mex.
H. W. Read, Cheyenne, Wyo.
G. W. James, Ruston, La.
Ben M. Hogan, Little Rock, Ark.
H. B. Bass, Enid, Okla.
Herman Brown, Houston, Tex.
Robert W. Long, Kansas City, Mo.
E. W. Menefee, Sedalia, Mo.
Robert M. Hoover, Kansas City, Mo.
E. C. Stewart, Wichita, Kans.
C. Russell Ralph, Topeka, Kans.
Francis J. Butler, Grand Forks, N. Dak.
J. L. Materi, Rapid City, S. Dak.
D. J. M. Leek, Minneapolis, Minn.

Rudolph W. Weitz, Des Moines, Iowa.

H. L. Hoak, West Des Moines, Iowa.

Ray Van Buskirk, Hawarden, Iowa.
T. L. Cottam, Milwaukee, Wis.

Lester C. Rogers, Chicago, Ill.
Clyde R. Yater, Shelbyville, Ind.

C. E. Frisinger, Ann Arbor, Mich.
Ray E. Ritchie, Ravenswood, W. Va.

John Cassidy, Memphis, Tenn.
R. R. Dawson, Bloomfield, Ky.

John S. Mullings, Columbia, Miss.
Ira McK. Koger, Jacksonville, Fla.

P. D. Christian, Jr., Atlanta, Ga.
George W. Kane, Roxboro, N. C.

Nello L. Teer, Jr., Durham, N. C.
Edwin L. Davis, Washington, D. C.

Frederic G. Krapf, Sr., Wilmington, Del.

Edmund B. Ward, Baltimore, Md.
Howard H. Sturdy, Pittsburgh, Pa.

William H. Weldon, Westfield, N. J.
Henry J. R. Dorer, Irvington, N. J.

G. E. MacMillin, Keene, N. H.
H. V. Collins, Providence, R. I.

Frank J. Rooney, Miami, Fla.
M. Clare Miller, McPherson, Kans.

(The total membership of the Governing Board includes 37 other directors whose terms will expire in either 1955 or 1956, only part of the board being elected each year for three-year terms.)

Advisory Board Members

The post-convention Governing Board meeting also approved the following appointments to the Advisory Board, which also includes all living past presidents of the association:

(Continued on page 42)



Incoming President John MacLeod congratulates Vice President George C. Koss.



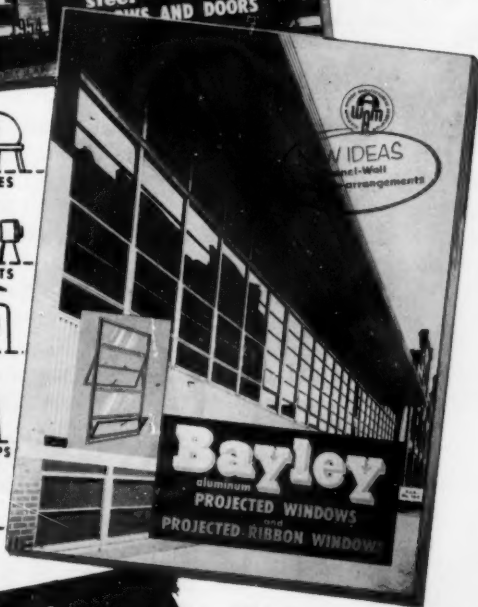
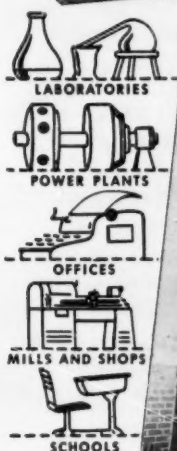
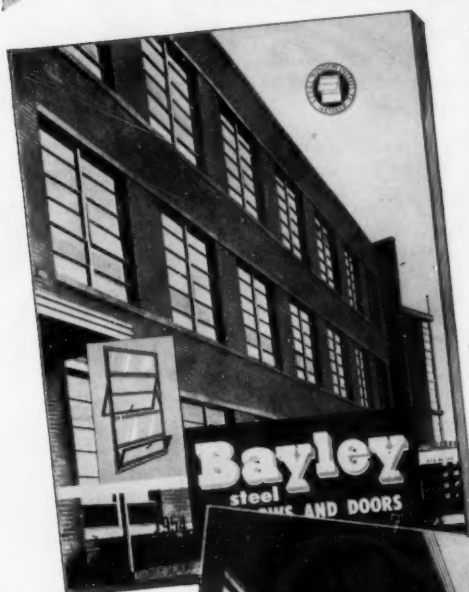
Secretary-Treasurer William Muirhead.

Announcing

two new window catalogs you'll find helpful
in new or modernizing work

by specialists in
Visioneering*

*They show you the time-tested,
service-proved way to save
on window maintenance*



Windows can make a big difference in your building maintenance budget—they account for such a large percentage of the building's wall area. So the best window is your cheapest buy in the long run. That's why Bayley metal windows—steel or aluminum—have enjoyed such regular specification preference from cost-minded buyers. By exceeding usual standards in depth, weight, design, workmanship, appearance and performance, Bayley Windows effect maximum ultimate economy. In these catalogs, that will be gladly sent upon request, you'll find complete details on Bayley Windows to best meet every condition. Bayley is always glad to also consult with you on your specific window needs. No obligation.

**WRITE
TODAY for
Your Copies**

**Visioneering—The science of coordinating vision,
air and light in modern building walls with win-
dows of advanced design.*

Bayley Visioneering Reflects 75 Years of Reliability

*Copyright 1953 The William Bayley Company

THE WILLIAM BAYLEY COMPANY

Springfield, Ohio

District Offices:

Springfield

Chicago 2

New York 17

Washington 16



ALLIS-CHALMERS AD-40 MOTOR GRADER GIVES YOU

Capacity

TO MOVE THE BIG LOADS

The Allis-Chalmers AD-40 Motor Grader is designed with the power, strength and performance features for BIG output in any going.

Full 104 brake hp. engine with power and speed to give maximum production on every heavy-duty grading job.

Famous ROLL-AWAY moldboard moves more material with less power output because it rolls the load.

Plenty of strength in the heavy-duty clutch,

transmission and final drive backs up the big blade capacity, while the exclusive single member tubular main frame absorbs the stress of large loads.

Power steering absorbs wheel shock, helps operator keep machine "on grade" with minimum effort.

High clearance at front axle and under circle means capacity loads without interference.

ROLL-AWAY is an Allis-Chalmers trademark.

Control

FOR FINISHING TO THE BLUE TOPS

The AD-40 is outstanding in the stability and full, precise control it offers for close tolerance work.

"Pilot house" visibility lets operator see the front wheels and both ends of the blade while sitting or standing.

Operator "feel" for the close finish work comes with mechanical linkage used on the AD-40.

Smooth, easy control with hydraulic steering, faster speed selection with constant mesh transmission, positive hydraulic brakes — all

help the operator do a better job.

Blade work is accurate, smooth because front-mounted lift cases eliminate long lift-arm shafts that twist or wind up under load. Tandem drive and shock-absorbing frame add to stability, help prevent blade chatter.

Full range of blade positions plus leaning front wheels permit handling all types of grading with ease.

Operator conveniences include adjustable seat and steering wheel, roomy platform, easily reached controls, full-view instrument panel.



HUGS BANKS AND STEEP GRADES

The AD-40's low center of gravity lets you grade on steep slopes. Proved engineering design keeps grader weight close to the ground... gives hugging ability second to none. Plenty of traction and extra stability resist side thrust... add to maneuverability.



In addition to the production and control advantages the AD-40 offers, exclusive repair and maintenance accessibility features make it the easiest grader to service. Why not see your Allis-Chalmers dealer for the complete story — or better yet, let him demonstrate the AD-40 right on your own job.

ALLIS-CHALMERS
TRACTOR DIVISION • MILWAUKEE 1, U. S. A.

John MacLeod Accepts Presidency of A.G.C. With Pledge to 'Give the Job the Best I Have'

• Association Gets Stronger Every Year, Says California Leader

JOHN MACLEOD took over his duties as new president of The Associated General Contractors of America at the 35th annual convention at Los Angeles last month with a characteristically plain, sincere statement of his aim "to give the job the best I have."

In his acceptance speech Mr. MacLeod, who as president of Macco Corp., Paramount, Calif., heads up one of the largest contracting firms on the West Coast, recalled the many years he has been "close to the Association" and remarked: "I can see that every year we get stronger."

Expressing his appreciation for the confidence placed in him in his election to the presidency of A.G.C., he voiced his recognition of both the honor and the responsibility involved. He paid tribute to retiring President C. P. Street, to the new vice president, George Koss, and to the leaders and members of the national staff of A.G.C.

Confident of Cooperation

"I want to say that it has been a great pleasure this last year to work with Gabby Street," Mr. MacLeod said. "It is a real challenge for me to fill his shoes."

"But I know that I will have the cooperation of many people in my new job. You have seen earlier this morning many of the men you elected as directors. This afternoon the directors will select the members of the Advisory Board. As soon as I can, I will appoint the chairmen and members of committees. I know that I will have the support of all these men. . . .

"I have also learned during my time that the president can count on the support of the A.G.C. Secretaries' and Managers' Council, and of the managers individually."

No Relaxation of Efforts

Discussing the A.G.C. program, Mr. MacLeod emphasized two items.

"We have made good progress in securing legislation to offset the effects of the Wunderlich case," he said. "But we cannot relax our efforts until the bill is passed."

"So far we have been successful in opposing passage of the subcontractor bill, which we genuinely feel is against the best interests of the entire industry. But here again, we cannot relax our efforts."

"You have just passed a resolution this morning by which you have agreed that A.G.C. members should take some positive and forward steps to solve the problems which we have with subcontractors."

"I believe that the move which we made was constructive. I think it is a good illustration of how our national association and our local chapters can work to help solve the problems of our industry in a constructive way."

Touching on internal affairs of the

association, Mr. MacLeod said he believed it was a sound move to defer action on the subject of duplicate memberships, adding: "We could not solve that problem now, because each person heard from has a different idea of how it should be handled. But I can assure you that we will continue to give study to the matter. And we will welcome every suggestion which will offer a satisfactory solution."

Advisory Board—

(Continued from page 38)

George H. Atkinson, South San Francisco, Calif.
Albert D. Blakeslee, New Haven, Conn.
Frank F. Burrows, Burlingame, Calif.
C. E. Cooke, Detroit, Mich.
Morris E. DeWitt, Poplar Bluff, Mo.
N. K. Dickerson, Jr., Monroe, N. C.
C. B. Ford, Dyersburg, Tenn.
H. H. Hall, East St. Louis, Ill.
Ira H. Hardin, Atlanta, Ga.
D. A. Harmon, Oklahoma City, Okla.
F. W. Heldenfels, Jr., Corpus Christi, Tex.
George Heller, Minneapolis, Minn.
V. N. Holderman, Columbus, Ohio.
Carl B. Jansen, Pittsburgh, Pa.
Thomas H. Joyce, Jr., Springfield, Ill.
M. B. Killian, San Antonio, Tex.
Charles H. Lembke, Albuquerque, N. Mex.
Cliff Mortensen, Seattle, Wash.
Carl E. Nelson, Logan, Utah.
Carl W. Olson, Lincoln, Nebr.
George P. O'Rourke, Sr., Dallas, Tex.
Joseph M. Powers, Fargo, N. Dak.
Walter A. Priest, Davenport, Iowa.
Leo P. Richardson, Detroit, Mich.
Frank W. Robertson, Huntington, W. Va.
R. A. Smith, Los Angeles, Calif.
William A. Soule, Pensacola, Fla.
P. M. Thornton, Hancock, Mich.
R. S. Ursprung, Cleveland, Ohio.
John A. Volpe, Malden, Mass.
Arthur H. Wells, Chicago, Ill.
Mark K. Wilson, Jr., Chattanooga, Tenn.
J. A. Henderson, Winona, Minn.
(Heavy Division Vice Chairman.)



John MacLeod, new A.G.C. president, is shown with Mrs. MacLeod and their three daughters. Left to right, the ladies are Miss Jacque MacLeod, Mrs. MacLeod, Mrs. John Klug and Mrs. William Shattuck.

» A WIDE range of association actions in behalf of the industry was further developed and reviewed by the 14 regular A.G.C. committees and five joint cooperative committees which held one or more sessions in connection with the 35th annual convention. A brief summary of the meetings are presented here.

Accident Prevention. The Accident Prevention Committee, headed by H. B. Alexander, Harrisburg, Pa., met with liaison groups of the A.G.C. Secretaries' and Managers' Council and safety engineers of the stock and mutual casualty insurers.

The committee reported a 54% gain in the number of contractors cooperating in the association's safety program in 1953 and a five-fold increase during the past 10 years. Awards were presented to chapters with improved safety programs, and to firms with outstanding records including 309 with no lost-time accidents in 1953. (Further details, page 103.)

Apprenticeship. Chairman Fredric G. Krapf, Wilmington, Del., reported that the committee's discussions centered on how the industry can best stimulate the entrance into construction trades apprentice programs by eligible and competent young men to carry on expanding construction programs and to replace losses of older men. The need was stressed for greater management interest and participation in apprentice training, and for literature to inform students of opportunities in the industry. (Further details, page 93.)

Contracts. The Contract Forms and Specifications Committee met to consider the progress being made by A.G.C. task units with the Corps of Engineers, Bureau of Yards and Docks, Bureau of Reclamation, municipal officials, and the Rural Electrification Administration, and in other work. The latest task unit formed was with REA, which held its first meeting in February.

Chairman George H. Atkinson, South San Francisco, made the motion, which was adopted, that the convention approve the new documents, *Uniform Public Works Engineering Construction Forms*. The forms were developed by the A.G.C. Municipal Specifications Task Unit working closely with the A.G.C.-American Public Works Association Joint Cooperative Committee. The forms are for use in connection with municipal construction projects other than building. The forms will be

Committee Work Underpins A.G.C. Action

• Fourteen Association Units, Five Joint Groups Meet

printed and available for distribution and use in the near future.

The committee also reported on work being done on flexible pavement specifications with the Corps of Engineers; on revisions in the standard federal construction contract form; and on conferences with the Comptroller General on A.G.C. recommendations with respect to bidding errors on federal projects.

As a sample of the effectiveness of work being done by task units Mr. Atkinson estimated that the Bureau of Reclamation has been saved approximately \$100 million through putting into effect recommendations which have been developed and made.

Endorsements. Recommendations of the Endorsements Committee were reported to the pre-convention meeting of the Governing and Advisory Boards and were approved.

Chairman Mark K. Wilson, Jr., Chattanooga, asked for approval of amendments to the Contractors Pump Standards voted by the Contractors' Pump Bureau, affiliated with A.G.C. The amendments permit improvements in pump engines. Two simplified practice recommendations and commercial standards sponsored by the U. S. Bureau of Standards also were approved, relating to open web steel joists and standard stock ponderosa pine doors.

Executive Committee. President C. P. Street presided at two meetings of the Executive Committee held in Los Angeles prior to the convention to give final review of actions taken by the association during the year. Actions of the committee during the year were approved by the Governing and Advisory Boards.

Finance. The Finance Committee, with 17 members present, gave thorough consideration to the association's financial structure and recommended a budget for the year of \$645,000, which was adopted by the convention. Past President A. S. Horner, Denver, is chairman. Past President Glen W. Maxon, Dayton, gave an interim report of a committee on duplicate memberships. The convention voted further study on the subject. Secretary-Treasurer William Muirhead presented the financial report which showed that the association is in sound

financial condition. J. B. Swem, of the national staff, is assistant treasurer, assisted by E. G. Boss.

Governing Provisions. The Governing Provisions Committee has been at work since last May on a rewriting and codification of the association's Governing Provisions in order to develop a document which will set forth the association's aims, purposes and procedures in a clear and concise manner, free from overlapping and apparently conflicting provisions.

Past President M. W. Watson, Topeka, Kans., committee chairman, recommended a revision, which was adopted by the convention, that authorized the Governing Board by a two-thirds majority to approve and put into effect at its meeting next September such revisions of the Governing Provisions as have been completed by that time and are not controversial. The board and convention also adopted a revision clarifying the procedure for committees in recommending changes in association policy.

Labor. The Labor Committee held a day-long meeting prior to the convention during which it discussed an extensive agenda.

Chairman Arthur H. Wells, Chicago, reported on the discussions which had been held in January with the Executive Council of the A.F.L. Building and Construction Trades Department and the general presidents of the international unions of the basic trades, on matters of mutual interest.

Discussions also were held on such subjects as the National Joint Board for the Settlement of Jurisdictional Disputes, administration of the Davis-Bacon Act, amendments to the Taft-Hartley Act, wage negotiations, welfare plans, and effects of government day labor operations on local collective bargaining agreements.

The committee recommended appointment of two subcommittees to study special problems. (See page 70.)

Legislation. The Legislative Committee met prior to the convention for a thorough review of the A.G.C. legislative program. Chairman Frank W. Robertson, Huntington, W. Va., reported on major A.G.C. activities; that it had testified before Congress on adequate highway appropriations, had recommended that Tennessee Valley Authority construction be exe-

ected by contract, and had taken appropriate action on other major subjects affecting construction.

Past President D. W. Winkelman, Syracuse, N. Y., gave a special report on association actions in seeking passage of legislation to assure the right of judicial review of disputes arising under federal contracts. E. J. Wheeler, Cincinnati, reported on association actions in opposing legislation which would regulate bidding and awarding procedures for subcontracts on federal projects. (For further details on these bills, see page 11.)

The committee reported that the national association will continue to keep members and chapters informed of significant developments.

Markets. The immediate and long-range prospects for construction markets are bright, although the intense competition prevailing will result in the "shaking-out" of imprudent bidders. H. B. Bass, Enid, Okla., reported for the Market Development Committee for Chairman Fred J. Early, San Francisco.

There is a vast backlog of needed public works, and the committee recommended that the association encourage the advance planning of projects by federal, state and local governments.

Further discussion was given to steps which the association might take when it became necessary to further stimulate the development of markets.

Membership. The prospects for increased membership in the chapters and national association were considered by the Membership Committee at its pre-convention meeting. Vice Chairman Parker H. Rice, Manchester, N. H., reported for Chairman W. Murray Werner, Shreveport, La., that at the start of 1954 there were 6,507 members in 1922 chapters.

Public Relations. The Public Relations Committee reviewed actions taken during the sixth year of the association's coordinated public relations program. Chairman George C. Koss, Des Moines, reported that the program has been expanding and becoming more effective each year.

The committee met again with a liaison group of the A.G.C. Secretaries' and Managers' Council for a discussion of ways by which the national association and the chapters can be mutually helpful in developing and expanding chapter public relations programs.

Continued study was recommended

of the means of bringing information about the industry to students in high and other schools, and through such a program to encourage greater numbers of qualified young men to enter the industry either through engineering schools or through apprentice or other training programs. (For further details, see page 95.)

Subcontractors. The Subcontractor Relationships Committee recommended a program which was adopted by the convention by which the A.G.C. locally and nationally and general

contractors "can voluntarily take constructive action to help improve, where necessary, the procedures for receipt of bids and awards of subcontracts, and the relationships between general contractors and subcontractors."

Chairman E. J. Wheeler, Cincinnati, stated that if the steps recommended prove to be helpful, additional action can be considered at a later time to bring about more widespread observance of the recognized ethical practices of the industry. (Further details, see Building, page 89.)

MacLeod Appoints 1954 Committee Leaders

» A.G.C. committee chairmen and vice chairmen appointed for 1954 by President John MacLeod are:

Apprenticeship: Hal S. Crain, Crain & Denbo, Inc., Durham, N. C.; H. D. Humphries, Concrete Builders, Inc., Atlanta, Ga.

Adjustment: C. P. Street, McDevitt & Street Co., Charlotte, N. C.

Accident Prevention: H. B. Alexander, H. B. Alexander & Son, Inc., Harrisburg, Pa.; Ira H. Hardin, Ira H. Hardin Co., Atlanta.

Contract Forms and Specifications: George C. Looz, Stolte, Inc., Oakland, Calif.; J. A. Henderson, United Construction Co., Winona, Minn.

Cooperative Construction Bureau: J. A. Thompson, J. A. Thompson & Son, Inglewood, Calif.; J. Rutledge Hill, Gifford-Hill & Co., Dallas.

Endorsements: Mark K. Wilson, Jr., Mark K. Wilson Co., Chattanooga.

Equipment Expense: F. W. Parrott, C. F. Lytle Co., Sioux City, Iowa.

Ethics and Trade Practices: Fred I. Rowe, W. L. Johnson Construction Co. & Associates, Columbus, Ohio; L. C. Rogers, Bates & Rogers Construction Corp., Chicago.

Finance: C. P. Street; A. S. Horner, A. S. Horner Constr. Co., Denver.

Governing Provisions: M. W. Watson, Topeka, Kans.; D. W. Winkelman, D. W. Winkelman Co., Syracuse, N. Y.

Insurance and Bonds: C. T. Naugle, Naugle-Leck, Inc., Minneapolis; B. F. Parrott, B. F. Parrot & Co., Roanoke, Va.

Labor: Arthur H. Wells, John Griffiths & Son Construction Co., Chicago; L. C. Rogers.

Legislative: R. A. Smith, P. J. Walker Co., Los Angeles; John A. Volpe, Volpe Construction Co., Malden, Mass.

Market Development: Fred J.

Early, Jr., Fred J. Early, Jr., Co., Inc., San Francisco; Leet M. Denton, Denton Construction Co., Detroit.

Membership: W. Murray Werner, Shreveport; J. W. Cawdrey, Cawdrey & Vemo, Seattle; Parker H. Rice, Manchester Sand & Gravel Co., Manchester, N. H.

Progress: F. W. Parrott; C. P. Street.

Public Relations: George C. Koss, Des Moines, Iowa; Mark K. Wilson, Jr.

Quantity Survey: H. W. Schmidt, Universal Construction Co., Inc., Milwaukee.

Subcontractor Relationships: E. J. Wheeler, Frank Messer & Sons, Inc., Cincinnati; Leo P. Richardson, W. E. Wood Co., Detroit.

A.G.C. co-chairmen of the national joint cooperative committees which the association maintains with professional societies and other associations in the industry are:

American Institute of Architects: Frank F. Burrows, Burlingame, Calif.

American Society of Civil Engineers: D. W. Winkelman.

Associated Equipment Distributors: C. E. Cooke, Cooke Contracting Co., Detroit.

Construction Industry Manufacturers Association: D. W. Winkelman.

American Association of State Highway Officials: Fred W. Heldenfels, Heldenfels Bros., Corpus Christi.

National Association of State Aviation Officials: Max C. Harrison, Harrison Construction Co., Pittsburgh.

American Public Works Association: C. R. Ralph, Kaw Paving Co., Topeka.

Surety Association of America: George Heller, Johnson, Drake & Piper, Inc., Minneapolis.

Producers' Council: Frank J. Rooney, Frank J. Rooney, Inc., Miami.

Barber-Greene DITCHERS

**DIG IN ANY SOIL . . .
ANY TIME OF YEAR . . .
FOR THE LOWEST COST PER FOOT OF TRENCH**

Year-round utility makes B-G Ditchers favorites everywhere. Advanced features include the exclusive Vertical Boom that permits digging right up to walks, foundations, other obstructions, leaving no ramp . . . the milling action of the fast moving, closely spaced buckets that cut through coral, frozen ground, asphalt pavement . . . the overload release that slips when overload occurs, automatically re-sets itself.



BG Model 44-C

Heavy-duty, full crawler mounted. Cuts to 8'3" deep, 24" wide. Adjustable grade indicator. Follow-up scraper. Adjustable spoil conveyor discharges to either side. Replaceable digging teeth. Power boom hoist for instant control of Vertical Boom.

BG Runabout

Model 705B Service Ditcher. Combination of exclusive Hydra-Crowd and Fluid Drive transmission offers new operating advantages. New, curved, reversible insert teeth last 3 to 5 times longer. Pneumatic tired, travels at 15 m.p.h. One-man operation.

Barber-Greene

Aurora, Illinois, U. S. A.



Hosts' Arrangements Praised by Convention

• Meeting Was Outstanding for Business and Pleasure

» FOR both business and pleasure the A.G.C. 35th annual convention was an outstanding success.

The business sessions started promptly, and all necessary work was accomplished expeditiously.

Tuesday, part of Wednesday, and Thursday afternoons were left free for

recreation, and the weather was co-operative.

The host chapter, the Southern California Chapter, and the co-sponsors, the San Diego, Central and Northern California Chapters, combined to provide the kind of entertainment programs for which the city is famous.

Those in attendance applauded vigorously and gave rising approval to the resolution which was adopted by the convention to express appreciation to their hosts in Southern California.

Welcome Night

The entertainment program was opened on a grand scale with the "Welcome Night" held on February 28. The entire mezzanine floor of the Statler Hotel was devoted to the reception which was attended by more than 2,000 persons.

The decorations of the various rooms and the entertainment were in the Spanish tradition of early Southern California. The reception was through courtesy of the surety industry.

Outdoor Events

On the bright, sunny Tuesday afternoon, March 2, several bus loads of men and women traveled to the "Day at the Races" held at Santa Anita Race



Californians prominent in planning entertainment for the A.G.C. 35th annual convention in Los Angeles greet the Honorable Norris Poulson, Mayor of Los Angeles. Left to right: Spencer Webb, Webb & White, General Convention Committee co-chairman; Mayor Poulson; R. A. Smith, P. J. Walker Co., committee co-chairman; and W. D. Shaw, manager, Southern California Chapter.



Left—The wives of members of the Southern California Chapter who were chairwomen of committees to provide entertainment for the ladies attending the convention were, left to right, Mrs. Spencer Webb, in charge of Ladies' Activities, and Mrs. J. A. Thompson, in charge of the Ladies' Luncheon and Style Show, who were assisted by Mrs. W. D. Shaw.

Right—Pictured here in attendance at the Ladies' Luncheon and Style Show are Mrs. John MacLeod, Los Angeles, left, wife of the 1954 A.G.C. president, and Mrs. C. P. Street, Charlotte, N. C., wife of the 1953 A.G.C. president.



Track. Luncheon was served at the clubhouse. A special race was run for the A.G.C. guests.

More than 100 men that afternoon visited the Wilshire Country Club. There a buffet luncheon preceded the golf tournament. Lou Pezel, of B. Pezel & Sons, North Hollywood, was presented the trophy for the low net score. Paul Fiorito, of N. Fiorito Co., Seattle, Wash., received the trophy for the low gross. Edward War, Hercules Powder Co., San Francisco, received a trophy for high gross.

Ladies' Events

On Wednesday at the time when the men were attending a general luncheon at which three speakers gave their views on the future business and market conditions, their wives were attending the Ladies' Luncheon and seeing the latest fashions at the Style Show. These ladies' events were held at the Cocoanut Grove, Ambassador Hotel.

Throughout the convention a Ladies' Headquarters was maintained in the Statler Hotel which was used as a gathering point for visiting and getting acquainted. Coffee was served and members of the Ladies' Host Committee were on hand to assist the visiting ladies in making their visit to Los Angeles a pleasant one.

Fathers and Sons

The annual Fathers' and Sons' Breakfast was held Monday morning with a large number in attendance.

Annual Banquet

The convention was climaxed by the annual banquet which was held Thursday night, March 4, at the Hollywood



At the annual banquet at the Hollywood Palladium 1954 A.G.C. President John MacLeod, Los Angeles, visits with singing star Marilyn Maxwell, and Toastmaster Pat O'Brien.

Palladium. More than 2,000 persons attended.

The dinner was in honor of A.G.C. presidents and their wives who were seated at the head table. The speakers were C. P. Street, who earlier in the day had turned over the presidency of the association to John MacLeod, and Mr. MacLeod. Toastmaster was Pat O'Brien of motion picture fame.

Singer Marilyn Maxwell headed the Hollywood cast which presented the entertainment to the accompaniment of

Freddy Martin's orchestra.

A surprise was a drum and bagpipe serenade to the new A.G.C. president by the Highland Society Band.

Convention Hosts

R. A. Smith, of the P. J. Walker Co., and Spencer Webb, of Webb & White, were co-chairmen of the General Convention Committee. Other members of the committee were:

Southern California Chapter: Donald E. Reed and W. D. Shaw.

Central California Chapter: Frank F. Burrows and Fred J. Early, Jr.

Northern California Chapter: Charles L. Harney, Ben C. Gerwick, Sr., and W. H. Arata.

San Diego Chapter: Robert M. Golden, William C. Chambers, and M. A. Mathias.

Chairman of the various convention committees were:

J. V. Quinn, Registration.

Donald E. Reed, Entertainment.

John Hook, Jr., Transportation and Tours.

Robert Grover, Golf.

J. A. Thompson, Hospitality.

Dan Gorton, Surety Group.

Mrs. Spencer Webb, Ladies' Activities.

Mrs. J. A. Thompson, Ladies' Luncheon and Style Show.

W. D. Shaw, Management.



A Ladies' Headquarters was maintained in the Statler Hotel throughout the convention as a gathering point for visiting and becoming acquainted. Coffee was served and members of the Ladies' Host Committee were available for assistance in making the visit to Los Angeles a pleasant one. Pictured above Mrs. John MacLeod, of Los Angeles, wife of the 1954 A.G.C. president, serves coffee to visitors.

Mobile CONCRETE MIX PLANT

21-FOOT discharge

(HIGHER WITH SPECIAL BOOM)

KOEHRING 16-E *twinbatch*.

with 9 m.p.h. rubber-tired mobility and high elevating boom, has unlimited application on all types of concrete construction work . . . for buildings, retaining walls, pilings, culverts, bridges, tunnels, widening highways and airport strips, batching into trucks, etc. Bucket rides on 60° elevating boom . . . discharges controlled batch into overhead forms, hoppers or chutes at a dumping height of 21 feet (higher with special boom). Boom also swings in an arc of 160° . . . speeds pouring of floors, foundations. This

heavy-duty 16-E easily mixes and distributes up to 50 cu. yds. per hour. 7-second skip hoist, split-second Autocycle mixing controlled by Koehring Batchmeter, and vertical syphon-type water tank, all assure consistent, maximum-strength concrete at top batching speeds.

Productive work-time is increased because mobile, rubber-tired 16-E works over pavement without planking, makes self-powered moves job-to-job at 9 m.p.h. Get more facts from your Koehring distributor, or write for literature.

KOEHRING CO., Milwaukee 16, Wis.

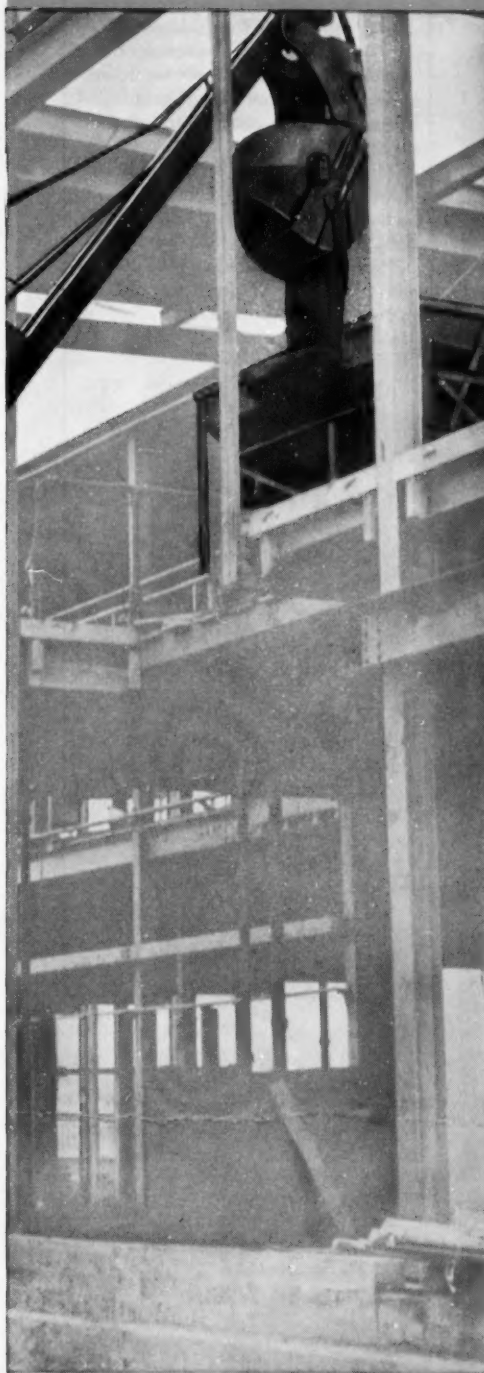
(Subsidiaries: JOHNSON • PARSONS • KWIK-MIX)



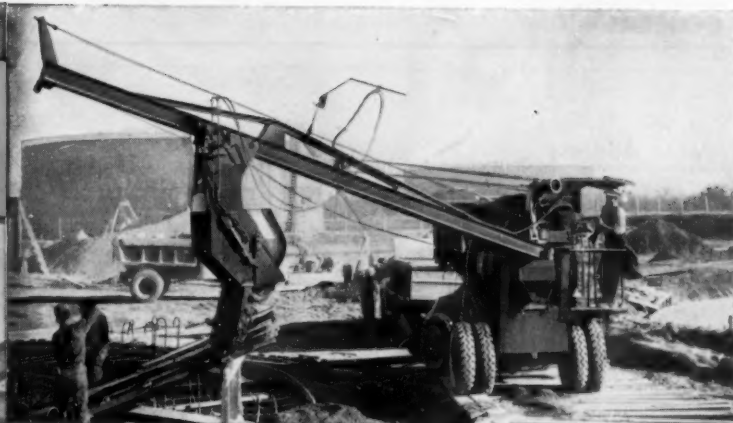
KOEHRING 16-E *twinbatch*®

PAVERS • FINISHERS • CONSTRUCTION MIXERS • CRANES • EXCAVATORS • DUMPTORS® • MUD-JACKS®

height



Ask, too, about production advantages of big 34-E twinbatch and Longitudinal Finisher for highway, airport, other major paving jobs.



CONTROLLED-DISCHARGE BUCKET

has clamshell-type door, hydraulically controlled... can be opened or closed at any time for gradual discharge.

24 cu. ft. water-level capacity is more than ample for the full 16 cu. ft. concrete batch, plus 10% overload.



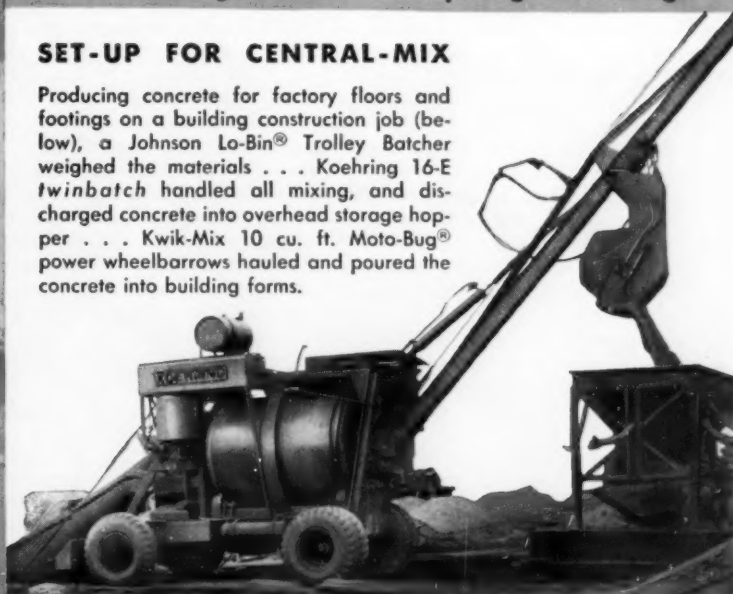
BOOM SWINGS IN 160° ARC...

... double-channel distributing boom on the Koehring 16-E twinbatch is power controlled... swings in a 160°

arc, elevates 60°... is self-locking and holds securely in any position for accurate spotting and discharge.

SET-UP FOR CENTRAL-MIX

Producing concrete for factory floors and footings on a building construction job (below), a Johnson Lo-Bin® Trolley Batcher weighed the materials... Koehring 16-E twinbatch handled all mixing, and discharged concrete into overhead storage hopper... Kwik-Mix 10 cu. ft. Moto-Bug® power wheelbarrows hauled and poured the concrete into building forms.



Keynote Address

'New Frontiers' for U. S. Economy Hold Vast Construction Potentials

• U. S. Steel President Depicts 'Shape of Things to Come.'

» NEW FRONTIERS for the American economy, with vast potentialities for the construction industry, were glowingly described by Clifford F. Hood, president of the United States Steel Corporation, in his keynote address to the 35th annual convention of The Associated General Contractors of America at Los Angeles last month.

"Great and positive forces are building up," Mr. Hood declared. "A whole new concept of living is now emerging from the laboratories and coming off the drawing boards. The way in which we plan and think and act in the days ahead will be of vital importance as to whether we capitalize on these new frontiers."

Construction 'Brightest Picture'

For the immediate future, Mr. Hood considered the prospects good, with the construction industry presenting "the brightest picture" in the economic outlook for 1954.

"The construction industry has just completed the biggest year in its history," he said. "We all know that you are mighty proud of the fact that you contributed more than \$34 billion worth of activity in new construction alone to the national economy last year. But 1953 is history. Its graphs, trends and results have been recorded, and while the records may have been outstanding by most standards, they remain merely a measure of what was accomplished."

"In many respects, therefore, the past is prologue to the immediate present and future. Some of last year's accomplishments were due no doubt to a basic change in the economic atmosphere. And this should result in the infusion of new spirit in the leadership forces of the nation."

"For the present, however, we have the economic momentum of large capital investment in new plants and equipment. There are indications that projects now under way or earmarked for the future will triple the toll road system of the United States. Expenditures by industry and government for research will continue to be high, but the brightest picture centers around the estimates of construction contract

awards for the coming year. These indicate another \$34 billion expenditure, and if the estimators are off in their calculations as they were in 1953, this figure could well approach \$36 billion.

"In other words, it might be said that our prospects are good. At least for the future, the evidence points to an abundance of the raw materials out of which leadership can fashion the shape of things to come."

'Largest User of Steel'

Adverting to the importance of construction activity to the steel industry, Mr. Hood remarked:

"United States Steel is a producer and fabricator of steel, and I would be a poor salesman, indeed, if I did not mention this to an assemblage that represents the largest user of steel in the nation."

His company is "particularly conscious of the ability within the construction industry," the speaker said.

"Just a year ago," he continued, "we placed our new Fairless Works near Morrisville, Pa., into operation. It is a completely integrated steel plant with an annual capacity of 2,200,000 tons of ingots. Now, I don't have to tell you that the construction of such a plant is no simple task, particularly when a portion of the plant site of 3,800 acres had to be raised in elevation some 10 to 15 feet before actual construction could be started. But with 200 prime contracting firms supported by 2,000 subcontractors and thousands of other contractors and suppliers all putting their knowledge and skill and manpower and mechanical equipment to the task, it was possible to cast the first blast furnace and tap the first open hearth in slightly more than 22 months, after the ground-breaking."

"Almost simultaneous with the Fairless Works development was the vast undertaking of our Orinoco Mining Company in Venezuela. This past January we brought the first shipload of iron ore from Puerto Ordaz to Fairless Works only two years after construction work was begun."

"Within that time, mining and ore

Keynote Speech Highlights

Main points of U. S. Steel President Clifford F. Hood's keynote address to the A.G.C. convention:

Brightest picture in economic outlook centers around estimated \$34 billion of new construction expenditures this year.

If estimators are off in their calculations as they were in 1953, this figure could well approach \$36 billion.

Rapidly increasing population is one of the most important factors for expanding economy. U. S. population is expected to total 180 million six years from now, almost 20 million more than present figure.

Growing movement to suburbs means creation of new communities, with construction of all the facilities they require.

Rising school enrollment calls for major construction program. Besides current backlog of 350,000 classrooms needed, surveys show 425,000 additional classrooms will be needed within the next six years.

Obsolescence of many facilities in cities will necessitate large-scale urban redevelopment and expansion programs.

Potentials of the atomic age are "virtually racing in on us."

Adaptation of electronics to industry opens up a new frontier of automatic operations promising greater productivity in plants and factories.

Research in physics and chemistry is giving impetus to new business, new products and new ideas.

preparation equipment was installed, a railroad and a highway were built to connect the mine with the Orinoco River 90 miles to the northeast and an ore loading dock was erected at the river. . . .

"These are merely two examples of the construction activity for new facilities and improvements that, in the past eight years, have required expenditures by U. S. Steel of \$2.2 billion. It is also part of the more than \$5.5 billion that the entire steel industry has invested in new plants and equipment during the same period of time."

"Similar construction is under way daily in almost every section of the nation. In every industry, your organization, which I understand represents 80 per cent of the builders of America,

is making a monumental contribution to growth and progress."

Detailing the buildup of "great and positive forces," Mr. Hood said:

"First of all, I believe the increase in our national population will be one of the most important factors in expanding our economy. It is impossible at the moment to assess its full impact. Our population by 1960—just six years from now—will be an estimated 180 million persons, or an addition of 20 million. This accelerated increase will create additional demands for everything from baby carriages to insurance policies.

The Suburban Potential

"Already symptomatic of this increase in our population is a growing movement to the suburbs by millions of Americans. It is estimated that 19 per cent of our national population now resides in suburbs. The real importance of this exodus is not necessarily in the numbers of people, but rather in the effect this type of living will have on the economy. The creation of new communities, of course, means the construction of millions of new homes. But beyond this, new communities mean new roads and highways, new medical and hospital facilities. They mean expanded methods of transportation and communication, water supply systems, increased electric power facilities, mile after mile of pipelines. They mean modern shopping centers, new post offices, new town meeting places, recreation centers and, most importantly, new schools and churches.

"The school problem in America today is almost a frontier in itself. Enrollments will increase by one-third within the next five years alone. As an example of how this increase will affect our present school facilities, studies reveal that 425,000 new classrooms will be needed by 1960. This is in addition to the backlog of almost 350,000 classrooms which are currently needed but not yet built. The cost of this new school construction program at current prices will equal the total amount spent last year for all construction in the United States.

"The needs of our increasing population alone indicate tremendous potentials and opportunities for every person in the nation. There are other frontiers, of course. We are at that stage in our national age where facilities in many of our cities are becoming obsolete. . . .

"If you will pardon a hometown example, Pittsburgh, Pa., is in the midst of a redevelopment program which has seen five new multistoried office buildings already erected, with five more proposed for the future. There are new parking garages, new parks and recreation centers. There is a \$100 million limited access highway, and a \$30 million new airport, second in size only to New York's Idlewild. There is a flood-control program involving the construction of eight reservoirs and dams. And directly or indirectly connected with this redevelopment, \$1 billion has been spent in the area for industrial expansion.

"In Houston, Chicago, Denver and just about every large city one could name, the same situation prevails. Everywhere there is progress, and plans are under way for still greater expansion and redevelopment of our cities.

"Another frontier that is virtually racing in on us at this moment is the prospect of a radically different world based on atomic power. Who could accurately predict what may be the potential of industry and our economy in the atomic age which we are presently entering? The possibilities undoubtedly are greater than anything we have seen so far.

Electronics and Construction

"In electronics, we have another area and one which has been crossed only partially. One phase of this field of electronics that is important for businessmen these days is the prospect

of more extensive automatic operations in industry—operations that can mean greater productivity in our plants and factories and all of the impetus which increased productivity can give to our economy. Success in adapting electronics or 'automation' to industrial processes may result, among other things, in an entirely new concept in plant layout and industrial construction which, by the way, is a new frontier in your own industry.

"Research in our laboratories in physics and chemistry has taken on 3-D proportions. The stimulus which such research can give to new business, new products and new ideas in every field is beyond assessment."

'One More Vital Ingredient'

These, Mr. Hood said, are merely "the more obvious opportunities that confront us," and many more are awaiting; but "the shape of things to come requires one more ingredient . . . the special and vital and necessary ingredient of private capitalism." Our greatest problem in the years ahead may well lie in developing a better understanding of the benefits and advantages that accrue from our economic system, based upon "the sound principle that if due attention were given the creation of wealth, this country could produce a larger economic pie with proportionately larger pieces," he concluded; and our success "depends largely upon the extent to which we can increase individual and group interest in work, in esprit de corps and in a winning morale."



U. S. Steel Corporation President Clifford F. Hood (right) is greeted by A.G.C. President C. P. Street before delivering convention keynote speech.

"Euc" Twin-Power Scraper . . . the One-Man Earth Moving Spread!



High production with one man and one machine

- Total of 380 or 400 h.p.
- Two Torque Converters
- 4-section reversible and interchangeable cutting blades
- 18 cu. yds. struck
- Two Torqmatic Transmissions
- Hydraulically actuated bowl, apron & ejector—only 13 ft. of cable

Five years of field experience have proved the versatility of the Twin-Power Scraper for contractors, large and small . . . it's a self-loading scraper in practically any material.

It's paying off for . . .

LARGE CONTRACTORS . . . as an independent production unit or self-contained utility scraper for all loading, hauling and grade conditions.

MEDIUM SIZE CONTRACTORS . . . requiring maximum production with minimum capital investment . . . and scrapers that can work

when adverse weather and job conditions stop other equipment.

SMALLER CONTRACTORS . . . who can bid on sub-contracts with limited equipment and personnel . . . its versatility has helped to make these users successful bidders on big jobs, too.

But seeing is believing, so ask your distributor where the nearest "Twins" are working or see the new Euclid color film featuring the Twin-Power Scraper at work on a wide range of jobs. A new folder, Form T551, is available for the asking.

EUCLID DIVISION GENERAL MOTORS CORPORATION, Cleveland 17, Ohio



Euclid Equipment

FOR MOVING EARTH, ROCK, COAL AND ORE



Top Performance on the Toughest Jobs...anywhere!



At Folsom Dam in California, Savin Construction Co. used 4 Twin-Power Scrapers as part of their large Euclid fleet. This well known contractor has purchased seven "Twins", having added additional units as a result of outstanding performance of his original machines on the New Jersey Turnpike. On big jobs like these, the flexibility of this scraper really pays off in high production and low cost per yard.



"Twins" have proved to be an ace in the hole for J. C. Critcher Inc. of North Carolina in getting larger, more profitable contracts. On this mountain highway job the "Euc" gave such a good performance that a second machine was purchased before completion of the contract. With two 190 h.p. engines and torque converters, the "Twin" easily climbed grades where crawlers and pans had to have pusher assistance.



Working in sandy clay on this Alabama road job, the Twin-Power Scraper proved a versatile, high production machine for L. J. Cousins Construction Co. Ability to self load and carry heaped loads up to 24 cu. yds. at speeds five or six times as fast as crawler drawn scrapers makes this "Euc" a top performer on small jobs as well as the big ones.



Tough loading conditions on the New York Thruway are taken in stride by the five Twin-Power Scrapers used by John Arborio on a 2½ million yard contract. Because of their tremendous power and traction the "Eucs" were able to work in the sticky, wet clay that stymied other equipment on this section of the big job.



Working on the Ohio Turnpike for Western Contracting Corp., this Euclid Twin-Power Scraper has top extensions that increase the truck capacity to 21 cu. yds. On one section of the job, the scraper picked up loads averaging 23 cu. yds. in 1.1 minute and made a complete 4700' cycle—load, haul, spread and return—in 5.3 minutes.



Stripping blue clay at an open pit gypsum quarry in Iowa, this Euclid has plenty of power and traction to self load and haul to the waste dump at high speed. Daily production records on this job show that a Euclid Twin-Power Scraper can move as much yardage as four crawler tractors and pans of comparable size on an 800' haul.

WRITE TODAY for performance data and a new catalog on Euclid Twin-Power Scrapers

EUCLID DIVISION

GENERAL MOTORS CORPORATION
Cleveland 17, Ohio

MOVE MORE LOADS PER HOUR AT MORE PROFIT PER LOAD WITH TWIN-POWER SCRAPERS

The Contractor and the Contracting Officer

• 'Contracting, as Practiced in America, Is a Profession'

By Rear Admiral J. R. Perry

Chief, Bureau of Yards and Docks, U. S. Navy

(Following are excerpts from an address by Admiral Perry to the 35th A.G.C. convention in Los Angeles:)

» I FEEL signally honored by being invited to address you of The Associated General Contractors—the largest and greatest organization of contractors in the United States. This honor is intensified because I am also provided the means of addressing the greatest aggregation of contractors in the world, since, by common consent, the American contractor is acknowledged to be the leader in his profession.

One of the few good things, perhaps I might say, the only permanent good thing, which resulted from the recent war, was the demonstration by the American builder of his superiority in his particular field. (His) superiority was such that, today, the American contractor is sought after where speed, quality, and reliability of construction are required. I am convinced that were it not for nationalistic restrictions in some areas, the services of our American contractors would constitute an even greater export than is presently the case, and might well serve as a solid foundation upon which

additional lasting national friendships would be erected.

You may or may not have noted that I referred to contracting, as practiced in America, as a "profession." I used the word profession on purpose. Its use was not accidental, nor was it a "Quid Pro Quo," because I have been honored by the invitation to address you today.

Its use was an attempt on my part to summarize in one word the greatly enhanced position of the American contractor in the esteem of the American people. This development has been most notable in the past four decades during which our country has called upon the contractors to assume great responsibilities during two major wars, in the development of our natural resources, in the expansion of our industrial empire, and in the training and development of our armed forces.

It was not too long ago that the American people thought of the contractor in the same terms as the butcher, the baker, and the candlestick maker. Today no one in responsible authority thinks of contracting as a trade. Construction is a profession in the true sense of that term.

A profession carries a measure of responsibility, not only for one's personal conduct, but of even greater importance, for the performance and conduct of all of those under him who are engaged in any given enterprise and who have any bearing upon the success of the whole undertaking. In other words, "the surgeon must be responsible not only for the success of the operation, but must also be responsible for the recovery of the patient and his permanent improvement."

Relationship with Client

Granted that the contractor is a professional man in the highest sense of the term, what does the contracting officer expect of him and—of equal importance—what does the contractor have every right to expect of the contracting officer?

I believe the contracting officer has every right to expect that ingredient of any professional service—unqualified, undiluted integrity of purpose—an integrity which is so self-evident that it requires no proof; an integrity which requires no congressional investigation to establish its existence. And, this integrity of purpose must be transmitted by the contractor to all of his personnel, to his subcontractors, and to his material vendors.

I have frequently had persons argue the relative merits of different kinds of contracts, namely: lump-sum, cost-plus-a-percentage, and cost-plus-a-fixed-fee. They have argued that the latter forms were wasteful and permitted the entrance of graft in all its pernicious forms. What the proponents of any type of contract did not recognize is the fact that no form of contract is any better than the sense of moral values possessed by either party to the document.

The responsibilities of the contractor then transcend his obligations to do good work expeditiously and with economy. It becomes his duty to protect the interests of his client in all fields, not only financial, but with respect to public relations, employee relations, and even diplomatic relations.

Contracting Officer's Duty

Those of us who have had broad experience in the field of contractor-contracting officer relationships know that there are many times when the contractor, if he is to properly discharge his responsibilities, must have the sympathetic understanding of the



Left to right, Del E. Webb, of the Southwest A.G.C. construction firm bearing his name; Admiral Perry, and John MacLeod, president-elect of A.G.C.

contracting officer. More than this, he must have the contracting officer's confidence in his ability and integrity, and, being human, he must receive encouragement, particularly when everything seems to go wrong.

The contractor will need help in his relations with other government departments, with the comptroller general, or even with the Congress. At times he may require an expediting of payments, or he may need the approval of the contracting officer to effect changes in plans, or specifications, or construction procedures, which may mean little or nothing in the ultimate effectiveness of the work, but which may be of major importance to the contractor. The contractor has every right to expect the contracting officer to help him in all of these things.

'Sympathetic Interpretation'

There are very few specifications ever written which are not susceptible to such strict interpretation by the contracting officer as to constitute an oppressive burden to the contractor. Lacking sympathetic inspectors—and by the term sympathetic, I do not mean lax—the contractor may be put to tremendous additional needless expense in the performance of his work. It is thereafter right and proper for the contractor to expect and to receive a sympathetic interpretation of plans and specifications within the limitations of proper safeguards of the interests of the American people. And, of fundamental importance, he must have immediate response to his proposals in order to avoid costly and morale-shattering delays.

Similarly, with respect to the matter of extra work, the contractor has every right to expect a determination of proper compensation based on strict equity, and not on a legalistic interpretation of the "fine print" which so few of us ever read.

In closing, I will say that one of the most useful and inspiring developments of our American economy has been the evolution of the American contractor as a professional man of great importance to our national community, of high integrity, and possessed of the strictest sense of moral values. My conviction is that the contracting profession will continue to grow in importance and never shirk its new and ever-expanding responsibilities. The contractor and contracting officer can constitute a hard-driving team which will safeguard the interests of the American people.

Chorpening Asks Resources Development

• We Must Build In Order To Grow, He Tells Convention

» BRIG. Gen. C. H. Chorpening, assistant chief of engineers for civil works of the U. S. Army, called for greater development of the nation's water resources in his address before the 35th annual convention of the A.G.C. The general said the country's population is growing at a rate which may well see it doubled by the turn of the century and expressed concern that for some years the geographical base of the Army's civil works program has been growing smaller.

Speaking for Maj. Gen. Samuel D. Sturgis, Chief of Engineers, who was unable to attend the convention, Gen. Chorpening said the adequate development of our water resources is of paramount importance in maintaining a dynamic and expanding economy, and that the civil works functions of the Corps of Engineers play a major role in this undertaking.

Noting that in the field of water resources development the U. S. stood between two forces—the need for development and the need for governmental economy—and that the resolution of this problem has necessarily resulted in the postponement of many worthwhile projects, Gen. Chorpening said that annual appropriations have been decreasing.

"The 1955 fiscal year appropriation

request, if granted, would project a construction program totalling some \$475 million, including unexpended balances left over from previous appropriations," he said.

The previous national policy, brought about by the Korean emergency, of not starting any new work was rapidly limiting appropriations and construction to completion of a number of going multi-purpose projects in only a few areas of the country, the general declared.

Broader Base Urged

"We felt there should be a reasonably uniform geographic distribution of the program, commensurate with the urgency of water resources problems in various areas," he stated. "Accordingly, we recommended that consideration be given to enlarging the base by initiation of a number of badly needed smaller projects.

"The Bureau of the Budget and the President went along with this sound principle and the 1955 budget contains requests for 20 new starts or resummptions on relatively smaller projects."

He said they should give new impetus to civil works construction.

"I hope this constructive action will be continued in subsequent years



Left, C. P. Street, retiring A.G.C. president, greets Brig. Gen. C. H. Chorpening, assistant chief of engineers for civil works, U. S. Army.

HOW TO HANDLE WET JOBS

#26 of a Series

SEWAGE TREATMENT PLANT

Victoria, Texas

Contractor: Mitchel Darby



PRE-DRAINAGE SOLVES JACKING PROBLEM

SOIL COMPOSITION of the above embankment (see photo) was as follows: first 18 ft, grey clay; below this, a 5-ft layer of coarse sand and large gravel flooded with ground water. Through this water-bearing section, contractor must jack an outfall line of 48-in. diameter—jack this big pipe a distance of 60 ft to the adjacent river.

• Old-timers can recall what dismay such water-fighting would once have caused. Today, with modern wellpoint methods, Griffin engineers found a quick, economical solution. Using 2 parallel (but unconnected) header lines—one on either side of the embankment, in a "railroad-track" effect—they successfully lowered water to the required depth. Note separate wellpoint system controlling ground water in jacking pit.



WELLPOINT CORP.

881 East 141st Street, New York 54, N. Y.
Hammond, Ind. Houston, Tex. Jacksonville, Fla.

In Canada: Construction Equipment Co., Ltd.
Toronto Montreal Halifax

NATIONAL DEFENSE

so that federal civil works can proceed on a relatively uniform and efficient schedule which recognizes the need for both a budgetary floor as well as a ceiling for conduct of this work.

"Another important factor which may exert a strong influence in water resources development is a reconsideration of the federal and non-federal interest in this program. The President has recently pointed out that this work should be on a partnership basis with appropriate sharing of cost between the federal government and the non-federal interests which benefit from the work. I believe this principle is entirely sound.

Greater Accomplishment Possible

"Its application in requiring a greater degree of local financial participation in civil works might in some cases slow down or defer these improvements. On the other hand, if states and local agencies are willing to participate more heavily than in the past this might offer the possibility of greater accomplishment, even with reduced federal appropriations.

"I hope this will be the result of this basically sound change in policy, and that water resources development can proceed on a broad front and on a better federal-local relationship than has ever existed before.

"Our country's population is growing at a rate which may well see it double by the turn of the century. At the same time, our level of living keeps rising, so that each person consumes more products of all kinds. To provide food, fiber and fabricated goods for tomorrow's extra millions, and to maintain our military strength, will require power and water, minerals and fuel, land and transportation, and all the other basic resources and facilities, in quantities vastly greater than are now available. The only solution is to keep on expanding our productive plant and our resource-development efforts, federal, local and private alike. We must grow in order to survive, and we must build in order to grow."

Corps-Contractor Partnership

Likening the construction industry to the Corps of Engineers in the sense that both wear "the same two hats" in that their know-how and equipment are used for defense in time of war, and for development of resources in

peacetimes, Gen. Chorpene said their relationship "rests now and always must rest upon three basic attributes: competence, responsibility and confidence. . . .

"I note from your program and from personal contacts the stimulating desire to improve on past performance, great though it has been. And I am reassured that competence and dynamic vitality are still the lodestars of the American construction industry. You may be sure that the Corps of Engineers is bending every effort to match you in this respect."

Praise for Affiliated Units

Gen. Chorpene had this to say about the 76 reserve construction units sponsored by A.G.C. chapters in the army affiliation program, several of which are on duty:

"Here (in the Korean war) again the construction industry played a major role. For example, it was the testing ground for your sponsorship of the Army's affiliation program. This is the 7th year of A.G.C. sponsorship of reserve engineer units. Many were necessarily called to active service during the Korean War, and they did an excellent job.

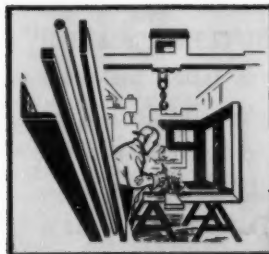
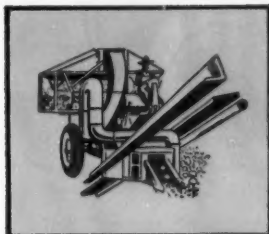
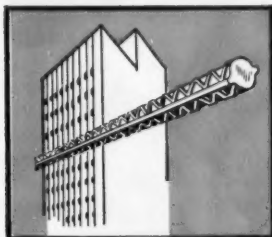
"In fact I do not know how the Army could have operated without them. I hope that we will be able to pass through this difficult readjustment period, and continue this part of our relationship on a peacetime basis."

Gen. Chorpene said "Confidence in your ability to build anything, anywhere, and on time is a basic element of military logistic planning. I do not exaggerate when I say that confidence in the ability and loyalty of the American construction industry is, from a military standpoint, worth many divisions in the field."

Regarding specifications he said:

"I think that the procedure, which has been in existence for some years whereby the Associated General Contractors and the Corps of Engineers get together by means of designated task committees can do much to continue and improve our partnership and effectiveness. It is gratifying to recall that most of the suggestions advanced by your committees at these frank, round-table discussions have been adopted."

Pouring Electric Furnace Steel For The South . . .



Electric furnace steel from Connors furnaces forms the steel "skeletons" of numerous large buildings, bridges and machines.

Connors electric furnace steel is rolled into concrete reinforcing bars for construction . . . into "merchant bars" for fabricators and manufacturers . . . into fence

and highway sign posts . . . and into other special shapes and forms . . .

The shapes of many things around us here in the South were formed of Connors Electric Furnace Steel. Shapes of many other things to come also will be formed of Connors Steel . . .

CONNORS STEEL DIVISION

H. K. PORTER COMPANY, INC.
OF PITTSBURGH

P. O. BOX 2562 • BIRMINGHAM, ALA.

CONNORS PRODUCTS

Concrete Reinforcing Bars
Hot Rolled Strip
Merchant Bars
Special Sections

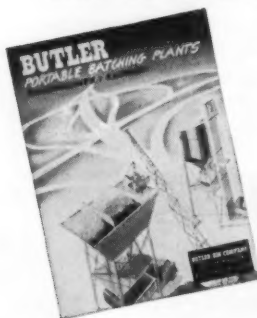
what turnpike job are **YOU** working on?



There's a great variance in specifications established for the Turnpike projects to be built this year. All, however, represent the most advanced thinking of the country's top-flight highway engineers.

BUTLER has kept pace with the requirements involved. You can have a BUTLER Roadbuilders Plant designed precisely to meet every innovation and every exacting specifi-

cation. Moreover, your BUTLER Plants will provide great economies in faster, fool-proof automatic batching. They're as modern as the highways they help to build. *For a full description of all the features BUTLER provides — write for Bulletin 205. Do it today — as a first step in getting an extra profit from your Turnpike job.*



Here is BUTLER Bulletin 205—Not only shows up-to-the minute features of BUTLER design — but also WHY BUTLER Plants are famed for their unusual portability.

BUTLER BIN CO.

**953 BLACKSTONE AVENUE
Waukesha, Wisconsin**

» BUSINESS in general, and the construction industry in particular, will enjoy a good year during 1954—the second best in the nation's history—according to forecasts of three representative leaders of government, business and labor who addressed the 35th annual convention of The Associated General Contractors of America at Los Angeles last month.

The three speakers, who took part in a symposium on "Future Business and Market Conditions," were Carl F. Oechsle, Deputy Assistant Secretary of Commerce for Domestic Affairs; Robert L. Gordon, vice president of the Bank of America, Los Angeles, and Richard J. Gray, president of the Building and Construction Trades Department, American Federation of Labor. (Their speeches are summarized on this and succeeding pages.)

Leading off the discussion, Mr. Oechsle remarked that construction last year accounted for one-tenth of the gross national product, and said that an industry of such size "will not only feel the effect of general business conditions, but will itself help to establish those conditions."

The Present Situation

The Commerce Department official made this analysis of present business conditions:

"Since the middle of 1953 we have seen a slight contraction in over-all business activity from the record high peaks established last year. It is important to note, however, that the downward movement has been centered in—and largely confined to—the manufacturing industries. It was these very same industries which previously had chalked up the most rapid gains in production and sales. This suggests that the downdrift in manufacturing is something of a reaction to what went before.

"The slight decline in manufacturing was largely due to a shift in the rate of accumulation of goods for inventories. This was to be expected. Shortages of materials arising out of the 1952 steel strike, and the need to adjust stocks to a higher production rate, caused manufacturers, wholesalers and retailers to speedily build up their inventories.

"By early 1953 production was accelerating at an exceptionally rapid rate. This all-out activity boosted employment, overtime and payrolls to abnormal peaks—and these, of course, stimulated greater consumer spending.

"A short-term acceleration like that

Business Year Second Only to '53 Forecast by Convention Speakers

• Commerce Official Cites Underlying Economic Strength

could not continue indefinitely. Last spring and summer inventories all along the distribution pipeline finally came into balance with the higher production and sales rates for civilian durable goods. Shortages eased and controls were abandoned. Consumers caught up on their backlog of unsatisfied commodity needs.

"The cumulative impact of these developments was just what you would expect. Retailers checked their inventory build-up. Wholesalers and

Mr. Oechsle added. Pointing to the high level of disposable personal income in the hands of the people as a factor favorable to the maintenance of consumption, he quoted the President's Economic Report to the Congress as stating that a continuation of present conditions should result in the liquidation of excess inventories and an early end to the readjustment period.

The Outlook for 1954

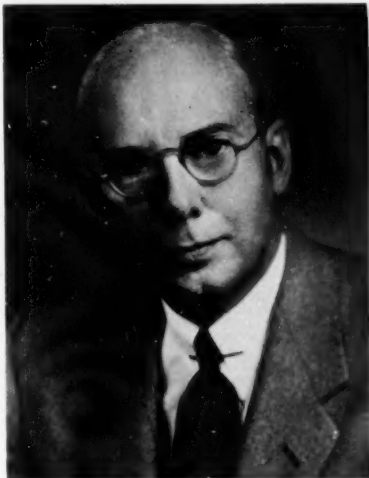
Mr. Oechsle recalled that when he spoke in Washington last November predicting that 1954 would be second only to 1953, newspaper editorials commented on his boldness in making such a statement "at a time when the air was filled with pessimism."

"But I didn't feel I was going out on a limb at all," he continued. "I was merely adding up the evidence gathered by the vast facilities of the Commerce Department and other government agencies. Since then, the additional evidence that has cropped up hither and yon makes me more convinced than ever that 1954 will be an exceedingly good year for business."

He cited these items of supporting evidence:

1. The estimate that the construction industry, "one of the basic sustainers of our economy," will have a volume of \$34 billion this year, only 2 per cent less than the record total of new construction last year, is being borne out by reports received so far. Preliminary figures on new construction put in place during January totaled more than \$2.4 billion, 3 per cent above January a year ago, and building permits in many cities are running far ahead of the usual seasonal level. Such reports indicate an outlook "even a little better" than the estimate of \$34 billion in new construction this year based on a joint survey last fall by the Department of Labor and the Department of Commerce.

2. Anticipated capital expenditures of business, "another very important barometer," were estimated for the first quarter of this year to be at about the same high rate as in 1953, according to a joint survey by the Depart-



Carl F. Oechsle

manufacturers no longer felt the need to hold large stocks.

"Inventory accumulation, which hit a peak annual rate of over \$6 billion in the second quarter, dropped to \$3 billion in the third quarter. And in the fourth quarter there was a complete aboutface as businessmen began liquidating their supplies at a \$3 billion annual rate.

"Meanwhile—and this is especially significant—total consumer spending did not change materially from the crest achieved in the second quarter of last year. The public simply shifted some of its spending from commodities to services.

"In other words, we started the transition from a wartime to a peacetime economy."

The main business indicators show that this transition is going smoothly,

ment of Commerce and the Securities and Exchange Commission.

"All around us we see evidence that hard-headed businessmen have confidence in the future," Mr. Oechsle commented. He cited large-scale capital expenditures scheduled by the automobile and steel industries for this year, sales forecasts by top management men in various lines anticipating a volume of business equal to or better than last year's records in most instances, and the expectation of executives in the metalworking industries that this will be their second-best year.

"The new Administration in Washington has been practicing economic statesmanship to create a climate favorable to economic stability and business growth," the speaker continued.

He described the new Business and Defense Services Administration established last October as a primary agency of the Department of Commerce for building teamwork between industry and government.

Encouragement for Business

"Through its close contacts with your trade associations and other representative business groups, BDSA provides other government agencies with latest information on conditions in specific industries," he explained.

"It presents industry's problems and views on tax matters, regulations and legislation in the appropriate councils of Congress and the Executive Branch.

"For the first time, the businessman has a centralized point in government where he can take his opinions and problems and be assured of intelligent understanding and action.

"The Business and Defense Services Administration is a two-way communications channel. It provides businessmen with helpful facts mobilized by the vast facilities of the Commerce Department—such things as population trends, market studies, trends in production, distribution, prices, and consumer preference.

"BDSA also operates a simplified defense materials system and works with the Department of Defense, Office of Defense Mobilization and private industry in making mobilization plans.

"In all of these matters BDSA operates through 25 industry divisions, representing major industrial groupings. The division representing you is the Building Materials and Construction Division."

One of the great objectives of President Eisenhower's program, Mr. Oechsle declared, is to "maintain an environment that will stimulate business activity and thereby strengthen job security and job opportunities." To that end, he said, the Administration plans to give "job-making tax incentives" to construction, auto, steel and other heavy goods industries where mass employment can be stimulated, and to small business for expansion. Among proposed incentives to business he listed the following:

Incentives to Private Industry

1. Liberalized depreciation allowances, which enable a business to write off for tax purposes the major part of the cost of new property in the first half of its life. This will encourage more new investment, bringing orders to construction and equipment firms and more jobs to workers.

2. A longer "carry-back" of losses for tax purposes, which would help new ventures and small businesses to navigate stormy weather and maintain jobs.

3. Eliminating the penalty tax on accumulated earnings needed for expansion. This would especially encourage small companies which are dependent on retained earnings to finance their growth.

4. Greater encouragement of research. At present big companies with established laboratories can get immediate deduction of unusually large research or development expenses. We propose to allow all firms—big and small—to do this, thus encouraging technological progress.

5. New housing incentives, in the form of expanded credit facilities to stimulate construction, renovate old buildings and clear slums. This will mean more work for contractors, furniture factories and equipment manufacturers.

6. New props to security. Our plan is to bolster private health insurance rather than to force unwilling Americans into socialized medicine; to cover 10 million more people with old-age and survivors insurance and to extend unemployment insurance to several million more workers, including federal civilian workers and employees of small businesses with fewer than eight persons on the payroll.

These measures, Mr. Oechsle declared, "will give workers and businessmen greater economic security and

confidence, so business will hum as never before."

The Long-Range Outlook

The Commerce Department official enumerated some of "the great forces which assure expanding business now and for many years to come." The highlights were:

- Population is increasing at an astonishing rate. About 4,000,000 babies were born in 1953, the highest annual figure on record. Predictions are our population will be 30,000,000 greater by 1965.

- We have more new families, and families are becoming larger.

- People are living longer, and with the spread of pension plans and social security, old people are more active, travel more, spend more.

- People have more leisure and travel more. They earn more money (nine times more Americans made \$5,000 or more in 1952 than in 1941) and their discretionary spending power is five times as much as in 1940.

- We now have 40,000,000 high school graduates, compared with 25,000,000 in 1940. Education is raising sights to higher standards of living.

- America is going suburban. In 12 large metropolitan areas, 72 per cent of the growth between 1940 and 1950 was in the suburbs.

- These economic pressures have created pressing needs—and providing for those needs will boom the construction industry.

- School facilities need to be almost doubled in the next few years. We have almost 70 per cent more children under age 5 than we had in 1940.

- More and better highways are urgently needed, with Americans driving 72 per cent more vehicles than in 1940.

- The bulk of our housing needs to be rebuilt or remodeled, 67 per cent of our homes being over 20 years old and 50 per cent over 30 years old.

- More hospitals must be built. Four million persons in 41 states are still without adequate hospital facilities.

- Much of our industrial plant and equipment must be modernized, because technological progress has made it obsolete and inefficient.

"Knowing all these solid elements of strength underlying the American economy," Mr. Oechsle concluded, "I'm sure you will agree that our best days are yet to be."

» THIS YEAR will see a "healthy" readjustment in economic activity, but nothing like a major depression or even a serious recession, in the opinion of Robert L. Gordon, vice president of the Bank of America, Los Angeles, one of three speakers who took part in a symposium on "Future Business and Market Conditions" at the 35th annual convention of The Associated General Contractors of America at Los Angeles last month.

"I do not feel that we are headed for a collapse," Mr. Gordon said. "None of the speculative conditions that existed in 1929 exist at this time. Businessmen all over the country have been warned again and again that they should be prepared for almost certain readjustments. As a result, most of them have made plans for adapting to a period of slackened activity. In some cases, these plans already have been put into effect. Inventories, which have been too high in most lines and are still too high in many, are being watched very closely and there is a great deal of acceptable evidence to the effect that pipelines are becoming progressively cleaned out and in some lines are already in the process of being refilled.

"Completion of the process will take time. Greater interest is being shown in cost-reducing equipment and in this field many contractors have exhibited great ingenuity. Others have not. For example, operators who use backrippers on their bulldozers testify to their great value, but very few contractors use them. Cost-reducing equipment is sometimes the difference between profit and loss. Wisdom, in buying equipment, is still a virtue, however, and you must not lose sight of the necessity of 'cash' working capital also.

"Managerial policies are being re-examined with an eye to improving efficiency, and the lost art of selling is experiencing a rebirth. . . .

"All of these things are indications that business is not going to be taken by surprise by any recession, and the present state of business psychology can perhaps be described as 'cautious optimism.' This, in my opinion, is exactly what is needed for a sound economy."

Underlying Economic Forces

Examining some of the forces underlying the economy "to see whether this attitude of 'cautious optimism' rests on anything more solid than

Banker Sees 'Healthy' Readjustment in '54 But No Depression or Even Serious Recession

• Californian Also Warns Contractors Against 'Foolishness'

wishful thinking," the California banker said:

"Unfortunate as it is from the standpoint of fundamentals, one of the principal bolstering forces at present is the high level of government spending. This is expected to remain high—very high. Expenditures at the federal level may be down by about 5 per cent from \$74 billion to say \$70 billion, but about half of this is expected to be offset by an increase in state and local expenditures on roads, schools, and other facilities which would be increased by only about 10 per cent above last year's approximately \$25 billion.

"It is said that almost half of the total non-federal-aid rural mileage is

are needed at a cost in the neighborhood of \$10.6 billion."

Other items in Mr. Gordon's list of underlying economic forces were:

- A recent inventory of metalworking production equipment showed more than half the tools were 10 years old or older, and much of it is expected to be replaced. Greater competitive efficiency can be obtained from newer equipment, and this could be a tremendous source of new business.

- Business expenditures on plant and equipment, which reached an all-time high of \$28 billion in 1953, are expected to fall only slightly below that figure.

- A survey shows that 51 per cent of industry's total capital outlay in 1952 was for modernization of existing facilities, 57 per cent in 1953, and it is expected to rise to 62 per cent for the period 1954-56.

- Nonfarm residential construction, which amounted to \$11.7 billion in 1953, is expected to reach at least \$11.2 billion this year.

- Commercial building in 1954 is expected to be about 10 per cent greater than last year.

- Public utilities plan to spend slightly more on construction in 1954 than the \$4.4 billion spent in 1953.

- Farm construction, which amounted to about \$1.5 billion in 1953, is expected to decline about 12 per cent this year.

- With all pluses and minuses added up, total construction is expected to decline 2 per cent in 1954.

- The condition of farmers, as measured by the relationship of financial assets to debts, is generally as good as or better than at any time in history, even though farm prices generally are down.

- Consumer purchasing power is still great, with total personal income reported to be continuing at a rate of more than \$280 billion annually and not expected to decline very much.

Inventories Weak Spot

"The real weak spot in the picture is inventories, and some belt tightening can be expected," Mr. Gordon continued. "Correction depends upon sales and sales are affected by unemployment. Some business statesman-



Robert L. Gordon

in need of improvement and that over 70 per cent of the 600,000 miles of roads in the federal-aid highway system are said to need overhauling. . . .

"Sorry from one standpoint, but indicating a possible boon to contractors, is the statement by the Office of Education . . . that there are more than 6,000,000 school children housed in school buildings which are beyond feasible rehabilitation and repair. An additional 1,000,000 school children are said to be attending school on a multiple session basis. . . . It is stated currently by the U. S. Office of Education that 312,000 new schoolrooms

ship will undoubtedly be necessary. It is felt that some correction is under way. Inventories declined substantially on a seasonally adjusted basis between September and November last year.

"The effect of inventory reduction on industrial production is already being felt. It is relatively slight in nondurable goods industries, new orders in May, 1953, of \$12.8 billion dropping in December to \$12.4 billion, or about 3 per cent. In durable goods industries, however, the drop was from \$13.1 billion in May, 1953, all the way to \$9.5 billion in December, a fall-off of 27 per cent. The combined decline was \$4 billion or 15 per cent, and this is not to be disregarded in our appraisal of conditions.

"Instead of worrying about the inventory adjustment, however, it is my opinion that it should be regarded as a healthy process, because it will tend to weed out the inefficient and will assist in preventing business from getting into a situation that could provoke a real depression. . . .

"There isn't time for me to treat the consumer situation at any length. I haven't been able to get the latest figures, but I am assured that consumer purchasing power is still great. Total debt owed by all individuals and unincorporated business at the end of 1952 represented 58 per cent of disposable personal income. The figure for 1953 is expected to be slightly higher than that. In 1940, however, it was 70 per cent and in 1929 it was 88 per cent. Stated differently, the American people had 42 per cent of their disposable income uncommitted in 1952, whereas in 1929, preceding the great depression, they had only 12 per cent. . . .

"From what I have said and from other studies which time has not permitted me to include in my remarks, it may be theorized that business during 1954 may be off as much as 5 per cent from 1953. . . .

"I don't look for any real suffering in such adjustments as may occur. There may be dislocations of greater or less intensity in different fields, but

I cannot foresee anything like a major depression or even a serious recession."

A Warning to Contractors

Mr. Gordon warned contractors against what he termed "foolishness." Speaking of soft spots in the economy and "the real likelihood of trouble in isolated situations," he said: "Those of us whose job it is to keep closely abreast of conditions in industries to which we lend money have a feeling that some of those soft spots could be in the construction industry, and we are inclined to feel that some of you may experience some of the 'real trouble' which some economists expect to see develop. As a matter of fact, I have heard it said that this could be a year of 'shaking out' for the construction industry during which the law of natural selection would operate on the weaker of you."

There is a feeling, he continued, that in the contracting field there could be a "substantially increasing number" of failures during 1954.

"This could be good for the industry even though some one would get hurt in the process," he commented. "It would serve to separate the men from the boys and could result in stabilization within the industry through the elimination of foolish and unsound competition as the result of eliminating those who encourage it. No one likes to see failures occur, but it seems that in the great scheme of things they are inevitable. The law of survival of the fittest is a law of nature that extends to business. The weak either become strong or give way to the strong. Carelessness succumbs to vigilance. Foolishness is overcome by wisdom.

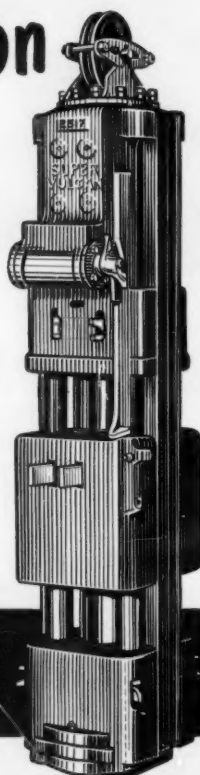
"In the construction industry today, there is the appearance of much foolishness. At least that is the feeling of many of us who lend money to the industry. No banker would claim a knowledge of a contractor's business equal to that of the contractor himself and certainly I do not. A banker is able only to look objectively at a contractor's operation in the light of experience, but he sees things that convince him that a given operator either is proceeding prudently or is being unwise. . . .

"The contracting business is a hazardous business at best, but there are those among you who carelessly expose themselves unduly to hazards. Some of you assume major obligations

Greater Penetration Per Blow SUPER VULCAN DIFFERENTIAL ACTING PILE HAMMERS

Rugged strength, simple design, positive action. Delivers twice the usual number of blows per minute with 25 to 35 per cent less steam per blow.

WRITE TODAY FOR COMPLETE DETAILS AND NAME OF NEAREST DEALER



Manufacturers of Pile Driving Hammers and Pile Extractors Since 1852
VULCAN IRON WORKS • 329 NORTH BELL AVENUE • CHICAGO 12, ILL.

in connection with work with which you are only vaguely familiar and to perform which you are entirely unprepared. Some of you obligate yourselves to perform work valued far and away beyond your ability to finance. I know one of your number, successful and considered smart, who, in order to obtain a subcontract, engaged himself to guarantee the performance of a weak prime contractor—in other words went on his bond—only to wind up almost losing his shirt when the prime failed.

"Some of you, in connection with contracts with the Army, Navy, Air Force, the Department of the Interior and other governmental agencies, repeatedly proceed, on the verbal request of a job site supervising engineer, to perform work not covered by the contract, even though in the past you have had to spend as much as two or three years trying to get a change order which would result in your being paid for the extra work.

Excessive Overhead

"I have known you to have fired construction superintendents for cause and then hire them back again to superintend jobs carrying even greater responsibility, only to have to fire them again after further costly loss.

"Some of you are guilty of maintaining excessive overhead, particularly in engineering staffs, for many months while waiting for jobs to break and then wind up taking work on bids so low as to allow no margin for error just to provide work for deadhead personnel.

"A frequent situation is where you become 'equipment happy' and have to undertake unprofitable work in order to earn depreciation, or as some of you call it 'rentals,' on the equipment you have no business owning in the first place."

Criticizing some bidding practices, of which he cited several specific examples, the speaker said: "As a matter of fact, there has developed in your industry a tendency on the part of many contractors, particularly the younger ones, to take work practically for wages. Bidding has become demoralized and as a result too many losses are being taken. Many contractors—some large, some small—apparently have become unable to earn anything except on 'cost plus' contracts, and this is not good for the industry. It could contribute to an adjustment within your own ranks."



Subdrainage Jobs
Move Fast with this
LONG LENGTH PIPE



Work moves fast and costs stay low when you install subdrains of Armco Perforated Pipe. Long, 20-foot lengths mean there are fewer pieces to handle and fewer joints to make than with short section, rigid pipe.

Armco Pipe is light in weight yet has ample strength to meet all loading conditions on highways, railways and airports. Two men can readily carry a 20-foot length and set it in place.

Strong, tight joints are quickly made with simple coupling bands, formed to fit the pipe corrugations. They help prevent clogging and there is no danger of disjoints or malalignment.

Save time and money by using Armco Perforated Pipe on your next subdrainage job. Write for complete data. Armco Drainage & Metal Products, Inc., 2564 Curtis Street, Middletown, Ohio. Subsidiary of Armco Steel Corporation.

ARMCO PERFORATED PIPE



Building Trades Leader Predicts Construction Will Have 'Close to if not Best' Year in History

• Gray Urges Speedy Congressional Action on Public Works

» "FOR US in the building and construction industry, 1954 will prove to be close to if not the best construction year that the country has ever enjoyed."

This was the forecast made by Richard J. Gray, president of the Building and Construction Trades Department of the American Federation of Labor, at the 35th annual convention of The Associated General Contractors of America at Los Angeles last month.

One of three participants in a symposium on "Future Business and Market Conditions," Mr. Gray added that he made this optimistic prediction with several reservations.

His first reservation concerned "the speed with which Congress will enact pending legislation which will enable us to carry on the many programs which are so urgently needed throughout the country."

As examples of needed programs which congressional action will affect, he mentioned highways, schools, hospitals, housing in all its forms, slum clearance, urban redevelopment, defense projects, reclamation and public power projects.

Surveys Support Optimistic View

Mr. Gray said he found considerable agreement with his optimistic view in surveys made by magazines dealing with the construction industry and by various business and economic groups. He referred specifically to a recent special report by *Business Week* making a long-range forecast of a gradual rise in the annual volume of new construction from \$29.9 billion in 1951 to \$35.9 billion in 1961.

The leader of America's organized building and construction workers, commenting on reports of increasing unemployment in recent months, said:

"I have attempted to analyze our current unemployment problem in relation to our industry and my optimism for this year of 1954 remains unshaken, for if history is to be given its due, I would suggest all of us have just cause to ponder the volume of construction beginning some time toward the end of 1954. In other words, if the present economic slump should continue for another two

months, we will indeed have something serious on our hands.

"We in the construction industry, as I see it, are the last to be hit by an economic slump and are always the last to get back on our feet when the slump ends. For these reasons, I think it is incumbent upon all of us to unite our efforts toward seeing our legislatures and Congress speedily enact appropriate legislation to let all



Richard J. Gray

construction programs get under way as soon as possible."

Rebuilding Older Urban Areas

Another encouraging sign cited by Mr. Gray in support of his optimism was "the tremendous amount of reconstruction now under way in many of our larger cities."

"For example, upon a recent visit to Pittsburgh, I was simply amazed at the complete removal and new construction of their downtown area," he said. "Similar plans are now being considered for the deteriorated area in the City of Washington. New York City is another of the cities. I was surprised to see a great number of projects, apartment houses, office buildings going into the older sections of the city.

"This rebuilding of the old sections of our cities is indeed a most optimistic prospect to all of us. It indicates to me that our brothers in the financial

field have reached their decision to invest where they have hitherto held back. I believe it is highly important that we all do our utmost in rebuilding the older sections of our cities."

Another reservation mentioned by Mr. Gray concerned "the many contingencies which can upset or very seriously impede" construction.

"For example, the fighting in Indo-China," he explained. "If it were to progress to the recent Korean stage in a matter of months, we could expect national controls as we experienced them a few years ago. Whether or not we will experience such an unfortunate affair is more than I can venture to guess. It must, however, be a factor in the over-all picture.

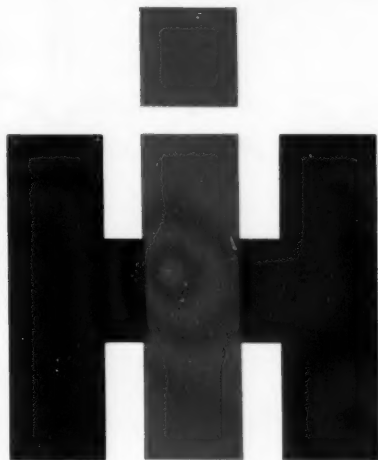
Fiscal Policy a Factor

"Equally important, I would say, and I would consider it one of my prime reservations in predicting the construction industry for 1954, is the national fiscal policy. In recent months, our new Administration has relaxed its initial so-called 'hard money' policy, thus resulting in a much more fluent and steady flow of mortgage money into the home building field. Changes can be made by our national Administration in its fiscal policy for any number of unforeseeable reasons at this time which could affect vitally our construction industry.

"In spite of these serious reservations, I am inclined to think at the end of this year when we total up the amount of construction put in place, we will have attained the highest mark in our history.

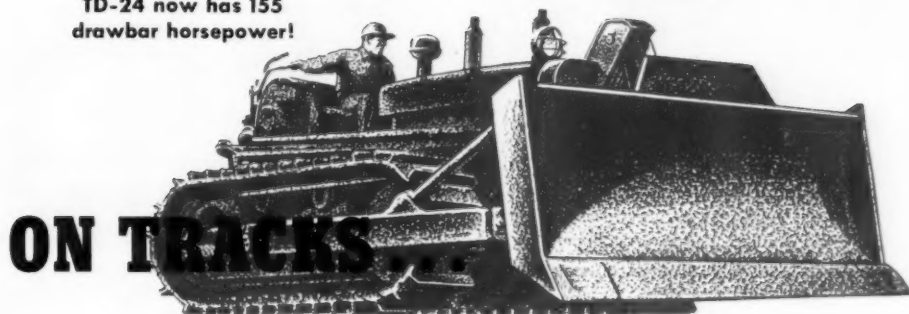
"In view of these considerations, I think it is wise for us in the construction industry, all branches of it, to examine ourselves very clearly. This situation can be serious, but are we prepared in all segments of the industry to contribute our greatest effort in bringing about a continuous volume of work so we can contribute to the national welfare the result of a high national income and high purchasing power for our people? A great lot of these backlogs that we have referred to are matters of public works. It is all right again for us to ask Congress to appropriate money, but then we cannot yell like the stuck pig about the taxes we have to pay."

Mr. Gray concluded with an appeal for all segments of the construction industry to cooperate for the benefit of the public and the industry, saying there are many opportunities to "work together as a team."



STILL THE CHAMP!

TD-24 now has 155
drawbar horsepower!



ON TRACKS



2T-75 rubber-tired
tractor with scraper

ON RUBBER

See it now at your INTERNATIONAL Industrial Distributors—a complete line of modern earthmoving equipment, led by the INTERNATIONAL TD-24, "The Champ" of crawler power and by the INTERNATIONAL two-wheel, rubber-tired tractors with scrapers.

Then see it in action on your own job—in a demonstration of INTERNATIONAL "power that pays."

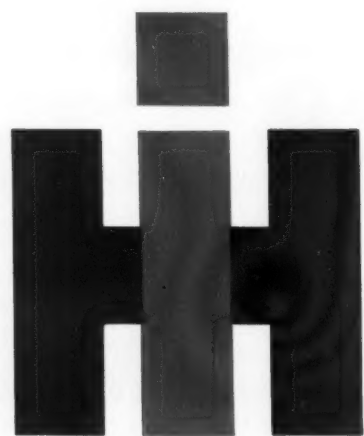
**"JOB-PHASED" EQUIPMENT
FOR EVERY MOVE IN EARTHMOVING**



INTERNATIONAL



2T-75 rubber-tired tractor with scraper



- For Every

INTERNATIONAL presents a complete line of "Job-Phased" equipment—on tracks and on rubber for every earthmoving job.



PAYLOAD EXPRESS. INTERNATIONAL 2T-75 rubber-tired tractor with heap-loaded scraper comes roaring around a tight curve in the cut.

- Seven rugged crawlers, led by the INTERNATIONAL TD-24.
- Twenty-two matching hydraulic and cable-controlled bulldozers and bullgraders.
- Four 4-wheeled scrapers.
- Two high-speed, two-wheel, rubber-tired tractors with scrapers (13 and 18-yard heaped capacity).
- A high-speed two-wheel, rubber-tired tractor with bottom dump wagon (20-yard heaped capacity).
- Four front-end loaders, for the TD-6 through the TD-18A—tops for excavating, materials handling and general utility work.

All under the INTERNATIONAL banner. All proved on-the-job for dependability and economy. All sold and serviced by men who know construction equipment and construction problems—the finest distributor organizations in the industry.

For full details on the *complete* line of INTERNATIONAL earthmoving equipment, check with your INTERNATIONAL Industrial Distributor today.



TD-24 with B-250 scraper



HOW TO BUILD A DAM FAST. INTERNATIONAL TD-24 crawler dozes and tamps with 4 massive sheepfoot rollers in a single operation.



INTERNATIONAL

Move in Earthmoving

Now All in One Family

the hardest-working work teams in the world!

The new INTERNATIONAL team stars not only a full line of rugged red INTERNATIONAL crawlers, complete with INTERNATIONAL scrapers and bulldozers, but also high-speed INTERNATIONAL two-wheel, rubber-tired tractors with scrapers.

This means that now, more than ever, your INTERNATIONAL Industrial Distributor is

"Earthmoving Headquarters" for your area. He offers you IH equipment to tackle any job, backed up by unsurpassed service facilities and parts supplies.

He's at your call, always, to help keep your equipment rolling . . . to cut down your down-time and pile up your profit-time . . . to serve you with INTERNATIONAL "Power that Pays!"

INTERNATIONAL HARVESTER COMPANY, CHICAGO 1, ILLINOIS



INTERNATIONAL

FOR EVERY MOVE IN EARTHMOVING



TD-24 crawler with matched scrapers



TD-18A crawler with matched scrapers



TD-24 crawler with bullgrader



TD-14A crawler with cable bullgrader



TD-9 crawler with hydraulic bulldozer



TD-9 tractor with front-end loader



TD-6 crawler with hydraulic bulldozer

TD-18A crawler with sideboom



Model 2T-75 two-wheel, rubber-tired tractor with 18 heaped-yard capacity scraper



Model 2T-75 two-wheel, rubber-tired tractor with 20 heaped-yard capacity bottom dump wagon



Model 2T-55 two-wheel, rubber-tired tractor with 13 heaped-yard capacity scraper

» IT HAS been 12 years since I last had the pleasure of addressing the national convention of the Associated General Contractors. When I appeared before your convention in Indianapolis during February 1942, we were working day and night to convert the nation into a great arsenal for the preservation of its existence and the democratic way of life.

The success of that common effort was unquestionably due in large part to the tremendous contribution of the construction industry. In my service as director of industrial personnel for the War Department and as a member of the Building Trades Stabilization Board of Review, I was in a position to appreciate the full extent of that contribution.

The construction industry also has a very important role to play in peace time, as evidenced by its part in the great industrial expansion which has occurred during the post-war period.

Labor Department Functions

These achievements during war and peace depend upon peaceful relations between labor and management. While trust and cooperation between the parties are the most important ingredients in reaching that goal, the Department of Labor has an important contribution to make. It performs many functions of great importance to employers and employees in accomplishing their common tasks.

For instance, the department furnishes construction statistics which are of high importance, to the construction industry. Through the cooperation of employers, employees and state agencies, the department develops standards for apprenticeship and promotes their acceptance. The apprenticeship program has received the enthusiastic support of contractors. Your executive director, Mr. J. D. Marshall, serves on the Federal Committee on Apprenticeship, and members of A.G.C. chapters are on joint apprenticeship councils throughout the United States. We also study industrial hazards, from which safety programs are developed and promoted.

As you are all aware, the Department of Labor administers the Davis-Bacon Act and related statutes which provide for predetermination of prevailing minimum wage rates on government construction projects. These acts are of great importance to the construction industry.

The Davis-Bacon Act, which was enacted in 1931 during the Hoover

'Fair and Objective' Davis-Bacon Rulings Pledged by Sec. Mitchell

- Cardinal Principle: 'Rates Actually Prevailing'
- Good Construction Year, Economic Upturn Forecast

(An address before the 35th A.G.C. annual convention in Los Angeles, March 2, 1954)

By James P. Mitchell, Secretary of Labor

Administration, was intended to prevent government construction from depressing wage rates prevailing in the locality. It was also enacted to protect the contractors who desired to pay prevailing wage rates from the competition of lower bidders who imported cheap labor from other areas.



Hon. James P. Mitchell

To assure the fullest protection for labor and management under the act, therefore, it is essential for both groups to give us wholehearted cooperation and constructive criticism.

Davis-Bacon Rulings to Be Fair

I am well aware that administration of these statutes in the past has been subject to criticism. I know that the criticism has not always been well-founded or constructive. I shall not address myself to the past, but will limit my comments to the present situation. I assure you that while I am Secretary of Labor, the program will be administered fairly and objectively. The cardinal principle guiding us in the administration of the act will be: we shall determine rates *actually* prevailing in the areas for the type of work involved.

To achieve that fixed objective, we have instituted certain administrative changes. We have introduced a system by which more accurate wage data is collected for determining wage rates. This includes not only checking collective bargaining agreements, as was done in the past, but also gathering information independently from contractors as to the rates actually being paid in particular areas on going projects.

We have also eliminated the backlog of hundred of requests from contracting agencies for wage determinations, and requests for determinations are now handled on a current basis. As a result, the award of contracts has been greatly expedited. This is evidenced by a recent survey of the Department of the Navy which revealed that the elapsed time between its request for a determination and its receipt of the determination dropped from an average of 33 days in January 1952 to 11 days in January 1954.

Enforcement Decentralization

Also, we are working out improvements in the enforcement of the wage-determination program which will benefit both the contractor and workers. These will include decentralization of functions to our regional offices, enabling more rapid, on-the-spot action. This should help enforcement and earlier detection of the few who do not intend to comply with the labor standards, thereby cutting off their unfair competitive advantage. It will also help contractors who want to obey the law but inadvertently fail to do so. By giving such contractors prompt service within their own operating areas, we prevent them from unwittingly running up a large liability.

Each regional office will be available to give advice and assistance to contractors regarding the operation of prevailing wage programs. Full agreement has already been reached with the Department of Defense and other contracting agencies on the decen-

FOR SALE

EUCLID

- 16—Euclid Bottom-Dump, 13 c.y. Tractor-Wagon Units, Model 43FDT, G-M 671 and 6A Diesel Engines, with 58W Wagons, 21.00x24—24 ply tires. Canopy Top and Windshield.
- 8—Euclid Bottom-Dump 13 c.y. Tractor-Wagon Units, Model 38FDT, G-M 671 and 6A Diesel Engines, with 89W Wagons, 24.00x25—24 ply tires, Hydraulic Booster Steering. Canopy Top and Windshield. New 1950.
- 26—Euclid Bottom-Dump 13 c.y. Tractor-Wagon Units, Model 71FDT, G-M Model 6A Diesel Engine, with 89W Wagons, 24.00x25—24 ply tires, Hydraulic Booster Steering. Canopy Top and Windshield. New 1951.
- 4—Euclid Model 49FD Rear-Dump Units, with 48BY Bodies, 12 c.y. capacity, powered by G-M Model 671 Diesel Engines. Serials 8839-40; 8183, 8200.
- 1—Euclid 3BV Loader, Serial BV-22; powered by Cummins HB1D 600 Diesel Engine.

ALLIS-CHALMERS

- 1—Allis-Chalmers Model HD19H Tractor-Dozer, Serial 309. G-M Diesel Engine Mod. 671 Caterpillar 85 Dozer and LeTourneau heavy duty P.C.U.

CATERPILLAR

- 4—Caterpillar Model D8 Diesel Tractor-Dozers, all in 8R Series, Serial Nos. 8R9048, 8R8981, 8R8423, 8A8073.
- 5—Caterpillar Model D8 Diesel Tractor-Dozers, all in 1H Series, Serial Nos. 4826, 4831, 2312, 7952, 8331.
- 3—Caterpillar Model 12 Graders, with scarifier and canopy top, powered by Caterpillar 9K Diesel Engines; Serial Nos. 9K1848, 9K1501, 7T1906.

BUCYRUS-ERIE

- 1—Bucyrus-Erie 54B Shovel-Dragline Combination Machine—2½ c.y.—Serial 20035.

WORTHINGTON PUMPS

- 2—Worthington 2-Stage Electric Motor Driven Turbine Pumps, Model #12Q-GH2, Serial Nos. 1349448-49. Capacity 1500 G.P.M.
- 2—Worthington 2-Stage Diesel Engine Driven Turbine Pumps, Model #12Q-GH2, Serial Nos. 1349450-51. Capacity 1500 G.P.M.

"GRIZZLY" EARTH-PROCESSING PLANTS

- 1—Complete "Grizzly" Earth-Processing Plant—Designed by Robins Engineers Division of Hewitt-Robins, Inc. to handle 2,600 c.y. per hour of "B" pervious type material. Full descriptive details on request.
- 1—Complete "Grizzly" Earth-Processing Plant—Designed by Robins Engineers Division of Hewitt-Robins, Inc. to handle 1,350 c.y. per hour of "A" impervious type material. Full descriptive details on request.

We also offer large inventories of miscellaneous repair parts for Caterpillar, Euclid, LeTourneau machines; and General Motors, Cummins and Buda engines. Will give liberal discounts on bulk purchases.

BIANCHI, CENTRAL, MUNROE-LANGSTROTH, RUGO

A Joint Venture

Address Inquiries To:
Peter M. Bianchi, Proj. Mgr.
Downsville, New York
Tel: Downsville 3-1101

LABOR RELATIONS

tralized program, and it will be put into effect shortly.

In the administration of the wage determination programs, as in the administration of all other programs and activities of the Department of Labor, our primary aim is to serve the welfare of all the people.

I know you are interested in estimates of future construction. According to the joint estimates of the Department of Labor and the Department of Commerce, nearly 35 billion dollars was spent for new construction put in place during 1953, which is well above any previous years. Further, I am happy to report that present indications point to only a slight tapering off in 1954, to about 34 billions.

"Banner Construction Year"

Our statisticians estimate that there will be increasing spending for some important types of construction, which will almost offset expected declines in other categories. As a result of the large unsatisfied demand and a steadily rising population, particularly in growing suburban communities, there will be a substantial gain in construction with respect to utilities, stores, schools, churches, recreational facilities and roads. In fact, most of these types of construction are likely to reach an all-time high in dollar volume in 1954.

While there will be declines during 1954 in industrial building and in military construction, office and warehouse building is expected to advance by 15 percent.

To sum up, it appears that this year will be another "banner" year for the

construction industry—the second best on record. These statistics do not offer any comfort to those who attempt to convince us that we are in the midst of a recession.

"A Necessary Readjustment"

Now let's talk for a moment about the general state of the nation's economic health. There are many people deeply and genuinely concerned over whether reports of layoffs, reduced work schedules, and lower business profits mean that we are on a slide.

That we are coming down from an artificially high peak of economic activity created by war and inflation cannot be denied. But I want to tell you as emphatically as I can: We are not going from boom to bust.

There may be a slight, but not significant, increase in unemployment for the next two months. Then, for another few months, we will rest at that level. This is part of a necessary readjustment that we could only postpone, not avoid—and it is my view that we are better off getting it over with fast, rather than adopting schemes to postpone it which would themselves make the adjustment sharper, more painful, and more protracted when it does occur.

Then—to complete my forecast—before long I would hope and expect to see the beginning of an upward climb which would eventually see employment growing, incomes increasing, and an America safely and soundly moving toward a new prosperity and new records of security and living standards for our people.

Committee Sparks Labor Relations Stand

• Two Subcommittees Authorized to Study Chapter Problems

» THE 35th A.G.C. annual convention recognized the necessity for sound labor-management relations so that the industry can carry out its work as efficiently as possible, can help to combat further inflation, and can hold construction costs in line.

Upon recommendation of the Labor Committee, the convention took a strong stand recommending that both management and labor "avoid further unwarranted increases in wages" and "avoid the adoption of welfare plans not suitable to the industry, and which cannot be administered fairly and equitably for workers."

Opposition was also expressed to "any federal law which would impair

or supersede labor legislation by the several states."

The recommendation also was adopted that "general contractors in carrying out projects abide by the wage rates and working conditions established for the area, avoid actions which would disrupt bargaining by the recognized collective bargaining group while it is being carried on, and point out to their clients the benefits to the industry and to the public of keeping conditions in the industry stabilized."

Committee Meeting Discussion

The Labor Committee held a day-long meeting February 26 with 22 members present. An agenda of 11

major subjects and 27 items was discussed. The committee's actions and recommendations were reported by Chairman Arthur H. Wells, John Griffiths & Son Construction Co., Chicago.

The Policy and Negotiations Subcommittee reported on its meetings in Miami Beach in January with the Executive Council of the Building and Construction Trades Department, and the general presidents of the international unions of the basic trades.

As a result of the discussions, the Executive Council authorized the appointment of a committee to cooperate with A.G.C. in studying the problem of loss of markets by contractors and loss of employment of A.F.L. unions created by industrial unions in seeking to secure for their members the construction, maintenance and repair operations previously carried out under contract.

The A.G.C. Labor Committee reported that, as recommended by the Mid-Year Board Meeting, association representatives had conferred with the new Secretary of Labor on administration of the Davis-Bacon Act, and that there had been improvements.

Joint Board Continued

The committee voted continued A.G.C. participation in the National Joint Board for the Settlement of Jurisdictional Disputes, but recommended vigorous efforts to expedite compliance with return to work orders.

The committee authorized the appointment of two special subcommittees to study special problems. One will study means of how best to develop and encourage greater participation by, and recognition of, A.G.C. chapters in collective bargaining in those areas where labor agreements are entered into. The other will study means of reconciling the local autonomy of chapters in their bargaining with the needs of certain types of contractors for special conditions and appeals to international unions in case of disputes.

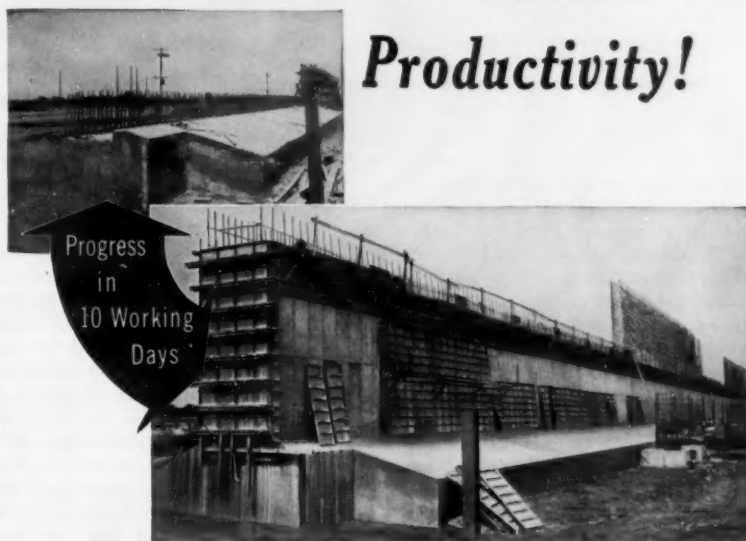
William E. Dunn, manager, Labor Relations, spoke before each of the Division meetings and the A.G.C. Secretaries' and Managers' Council, giving further explanation of the committee's actions, and the background of proposed labor legislation.

Edward T. Kelly, Labor Service Advisor and alternate member of the jurisdictional disputes board, told the same groups of operations of the board. Arthur F. Hintze, of the labor staff, was available for consultation.

UNI-FORM Concrete Forms

INCREASE Labor

Productivity!



Form more contact area per man hour with **UNI-FORM** Concrete Forms... the **MECHANIZED** concrete forming system

UNI-FORM
Concrete
Forms
Provide:

- FASTEST FORMING SYSTEM—ground to ground
- Automatic accuracy of wall widths for faster erection
- Alignment and bracing on 1 side only—substantially reduces labor, material cost
- Fast job starts... Ready to use when they reach the job—save time
- LOWEST ALL AROUND CONCRETE FORMING COSTS

RENT with a Purchase Option... Try Before You BUY

Write for the new **UNI-FORM** catalog

UNIVERSAL FORM CLAMP CO.

GENERAL OFFICES AND FACTORY: 1238 N. Kostner • Chicago 51, Illinois

OFFICES AND WAREHOUSES:

CLEVELAND, OHIO • BALTIMORE, MARYLAND • HOUSTON, TEXAS
SAN LEANDRO, CALIFORNIA • LOS ANGELES, CALIFORNIA

SERVICE WHEREVER YOU BUILD... COAST TO COAST

DISTRIBUTORS IN PRINCIPAL CITIES



Copyright 1954 by UNIVERSAL FORM CLAMP CO., Chicago 51, Ill.

Supreme Court Interprets Davis-Bacon Act for First Time, Overruling Court of Claims

- Recovery of Wages Exceeding Predetermined Rates Denied
- Upsets Practice of Hiking Rates to Obtain Manpower

» IN THE first decision interpreting the Davis-Bacon Act since its passage in 1931 and amendment in 1935, the United States Supreme Court has held that the wage rates predetermined by the Secretary of Labor and included in government construction contracts do not constitute a representation of the wage rates which will have to be paid in order to obtain employees.

The issues in the case (*U.S., Petitioners, v. Binghamton Construction Co., Inc.*) were set forth by Chief Justice Warren in his decision on March 8 as follows (footnotes have been deleted):

"This case is before us on writ of certiorari to the Court of Claims. The question presented is whether the schedule of minimum wage rates included in a government construction

contract, as required by the Davis-Bacon Act, is a representation or warranty as to the prevailing wage rates in the contract area. We hold that it is not.

"The Davis-Bacon Act requires that the wages of workmen on a government construction project shall be 'not less' than the 'minimum wages' specified in a schedule furnished by the Secretary of Labor. The schedule 'shall be based upon the wages that will be determined by the Secretary of Labor to be prevailing' for corresponding work on similar projects in the area. The Act also provides for penalties, including termination of the contract, if it is found that the contractor is paying less than the scheduled rate."

The Binghamton Construction Co.,

A.G.C., was successful bidder on a federal flood control project at Elmira, N. Y. The wage predetermination dated January 31, 1941 was included in the invitation for bids issued March 29. The company's bid of \$232,669.30 was accepted on May 14, and the contract was formally approved June 3 with notice to proceed given two days later by the Corps of Engineers.

Adjustment Demanded

However, on March 4, three weeks prior to the invitation for bids for this project, the Department of Labor made a predetermination of wage rates for a federal housing project in Elmira containing rates higher than those for the flood control project.

The company protested to the contracting officer that it could not obtain workmen at the wage rates specified in the flood control project predetermination. In order to secure workmen the company paid the higher rate predetermined for the housing project.

The firm then demanded an adjustment in compensation on the theory that the Labor Department schedule was an affirmative representation as to the prevailing wage rates and that the contractor was entitled to rely on such representation in computing his bid. The contracting officer denied relief, the Chief of Engineers dismissed the appeal, and the firm appealed to the United States Court of Claims.

Lower Court Action

The Court of Claims found that an investigation by the company would have revealed that the prevailing rates were higher than the rates specified in the contract. Nevertheless, the Court allowed the company a recovery consisting of the difference between the rates specified in the contract (\$1.00 for carpenters and 50¢ for laborers) and the rates predetermined for the housing project (\$1.125 for carpenters and 55¢ for laborers). It allowed a recovery of \$7,363.22.

The Court of Claims reasoned (as it had done in previous similar cases) that the contract wage schedule misrepresented—although inadvertently—the prevailing wage rates in the Elmira area, since prior to the invitation to bid, the Labor Department had made a higher predetermination and the contracting officer could have ascertained the fact. The contractor, the Court held, was entitled to rely on the wage schedule as the Labor Department's latest predetermination and



CONCRETE JOIST CONSTRUCTION

RENTAL and ERECTION SERVICE

Ask for Catalog No. 3100



- ★ Low Cost Form Work
- ★ Fire Proof
- ★ Long Spans
- ★ Standardized Sizes
- ★ Flexible in Design

Gateway offers two types of Metal Pan Systems to contractors: The Nailed-Down System and the Gateway "Slip-In" System. A complete manual of erection details is available by contacting the nearest Gateway office. Centering erection is a "Gateway" specialty. 100,000,000 sq. ft. of Form Area installed, is Gateway's guarantee of service, reliability and responsibility.

Stocked in . . .

CHICAGO—CINCINNATI—NEW YORK—BALTIMORE—KANSAS CITY

Gateway Erectors, Inc.

3233 W. Grand Ave., Chicago 51, Ill. NE vada 2-1100

as a representation of the wages it would have to pay when the work was done.

Supreme Court Decision

The Supreme Court, in overruling the Court of Claims, stated:

"The act itself confers no litigable rights on a bidder for a government construction contract. The language of the act and its legislative history plainly show that it was not enacted to benefit contractors, but rather to protect their employees from substandard earnings by fixing a floor under wages on government projects. Congress sought to accomplish this result by directing the Secretary of Labor to determine, on the basis of prevailing rates in the locality, the appropriate minimum wages for each project. The correctness of the Secretary's determination is not open to attack on judicial review."

'Only Minimum Wages'

The Supreme Court further stated that the government did not falsely represent the prevailing rates, adding:

"Neither the contract nor the specifications refer to 'prevailing' rates. The contract speaks only of 'wage rates not less than those stated in the specifications.' The specifications in turn speak only of 'minimum wages applicable in the locality.' The only reference to 'prevailing' rates appears in the statute itself, which provided that the minimum rates are to be 'based upon . . . the wages . . . determined by the Secretary of Labor to be prevailing.'"

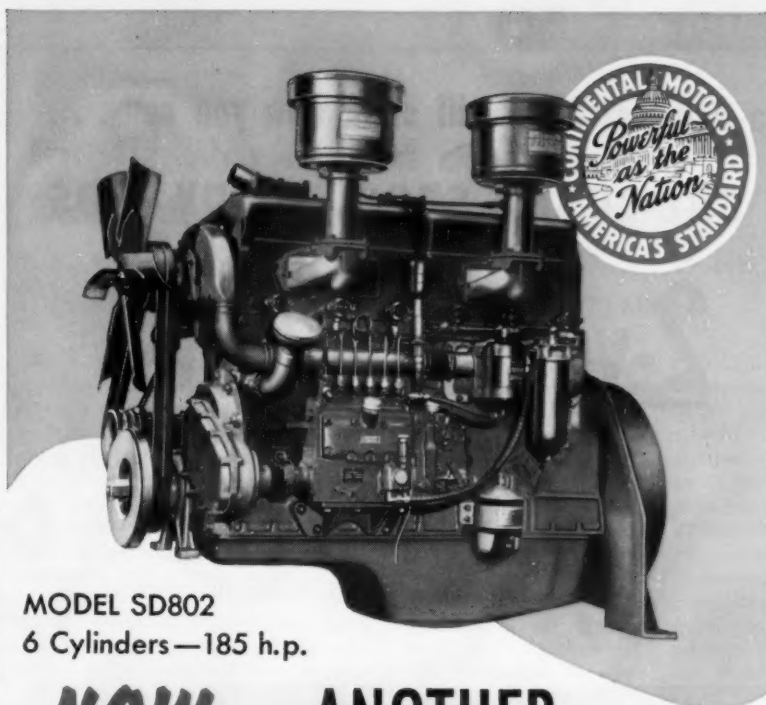
The Court of Claims decision was reversed, and the recovery denied.

It may be noted that this decision in effect overrules former actions by the Labor Department when higher than actually prevailing rates were specified on the basis that such wages would be necessary to properly man the project.

Project Differentials

The Supreme Court added a further statement to its decision:

"The government further contends that the Secretary of Labor was justified in fixing different minimum rates for the housing and flood control projects according to the degree of skill required for each project, and that respondent is estopped to claim misrepresentation because of its failure to make an investigation of labor costs before submitting its bid. Because of our disposition of the case, we find it unnecessary to reach these issues."



MODEL SD802
6 Cylinders—185 h.p.

NOW... ANOTHER Husky RED SEAL DIESEL ... the CUSHIONED POWER SD802

Plus-values inherent in Continental's Cushioned Power design join with stepped-up output in the newest Red Seal Diesel, the 185-h.p. SD802. This overhead-valve six of efficient 4-cycle type offers exceptional performance—high power, low operating cost. As with other

Continental Cushioned Power Diesels, wide interchangeability of parts with Red Seal gasoline

models minimizes upkeep expense. Write for bulletin containing complete specifications.

THESE FEATURES ASSURE POWER, ECONOMY, LONG LIFE

Cushioned Power Combustion Chamber	Chrome Top Rings
Removable Cylinder Sleeves	Non-stick Compression Rings
Built-in Oil Cooler	Separate Intake and Exhaust Manifolds
Tocco-Hardened Counterweighted Crankshaft	Full-length Water Jackets
Tri-metal Replaceable Bearings Throughout	High-capacity Submerged Gear Type Oil Pump

1819 BROADWAY, NEW YORK 23, NEW YORK • 1252 OAKLEIGH DRIVE, EAST POINT (ATLANTA) GA. • 6218 CEDAR SPRINGS ROAD, DALLAS 9, TEXAS • 3817 S. SANTA FE AVE., LOS ANGELES 58, CALIF. • 910 S. BOSTON ST., ROOM 1008, TULSA, OKLA.

Continental Motors Corporation

MUSKEGON • MICHIGAN

a demonstration will show how you can . . .

cut costs, speed many jobs with this **2-yd. Tractor Shovel**

The Tractor Shovel's value in mechanizing many phases of construction has been proved again and again by the versatile Allis-Chalmers 1-yd. HD-5G. The HD-9G, with its larger 2-yd. bucket, offers the same wide range of use with *double* the working capacity.



EXCAVATES BASEMENTS. Efficiently digs, loads materials of all kinds. Shift pattern lets operator go from any forward to any reverse speed with one movement of shift lever . . . for faster loading cycles.

HD-9G — 72 drawbar hp.
29,900 lb.
with standard 2-yd.
hydraulic bucket.

Ask your Allis-Chalmers dealer to show how your construction jobs can be mechanized by the HD-9G, or one of the other 1- to 4-yd. Tractor Shovels — or write direct for more information.

ALLIS-CHALMERS

TRACTOR DIVISION • MILWAUKEE 1, U. S. A.



PREPARES RAW LAND with standard 2-yd. bucket, bulldozer blade or rock fork. Removes rocks, clears trees and brush, fills gullies, levels and rough grades. Angledozer blade also available. Rear-mounted scarifier increases efficiency in tough digging.



REDEVELOPS LAND — The HD-9G Tractor Shovel effectively clears and loads rubble from razed slum areas — makes land available for new building projects, parking areas, playgrounds.



BACKFILLS, LEVELS, LANDSCAPES. Fills in plumbers' trenches, around sewer, gas and water pipe — transports excess dirt between houses, fills in around foundations, finish grades, builds driveways.



MOVES, LOADS, SPOTS MATERIALS with bucket. Also lifts, loads, skids lumber and pipe — elevates bricks, shingles to roof height. Bucket has 11 ft. 4 in. dumping height. Crane hook also available for special lifting jobs.

» THE Heavy Construction and Railroad Contractors' Division held a morning session in connection with the A.G.C. 35th annual convention in Los Angeles to consider matters of particular interest.

Results of the meeting were reported to the convention by Chairman C. H. Cunningham, Condon-Cunningham Co., Omaha, Nebraska.

New division officers elected for 1954 were A. S. Macdonald, Strong & Macdonald, Inc., Tacoma, Wash., chairman, and J. A. Henderson, United Construction Co., Winona, Minn., vice chairman.

Discussions centered around public works construction and particularly matters of contracts, specifications and administrative procedures. Participating in the discussions were guests who included:

Officials Are Guests

Corps of Engineers: Brig. Gen. C. H. Chorpene, Assistant Chief of Engineers for Civil Works, and Mason C. Prichard, special assistant, military construction.

Bureau of Yards and Docks: Rear Admiral J. R. Perry, Chief; Capt. C. W. Porter, District Civil Engineer, San Diego; and D. W. Patterson, specifications branch.

Bureau of Reclamation: W. A. Dexheimer, Commissioner, and Grant Bloodgood, Associate Chief Engineer.

In presenting the written report of the past year's work by the division, Manager James M. Sprouse described a meeting held by an A.G.C. committee with Comptroller General Lindsay C. Warren on the subject of bidding errors. The division had recommended a resolution which was adopted by the Governing and Advisory Boards last September opposing the award of government contracts at an adjusted price upon plea of error by the bidder.

Specifications Work Noted

The committee, composed of Mr. Henderson, William DeButts, C. F. Lytle Co., Sioux City, Iowa, and E. P. Coblentz, McLean Contracting Co., Baltimore, held a satisfactory conference. Subsequently the Comptroller General replied that there were legal precedents he would be obliged to observe, but that he would give full consideration to the A.G.C. recommendation in future cases.

George H. Atkinson, Guy F. Atkinson Co., South San Francisco, who is chairman of the A.G.C. Contract Forms and Specifications Committee,

Public Works and Specifications Subjects of Heavy Contractors

- Army, Navy, Reclamation Officials Division Guests
- A.G.C.-Reclamation Work Saved \$100 Million

spoke on the outstanding basis of co-operation which had been developed by task units of the committee working with the Corps of Engineers, Bureau of Yards and Docks, Bureau of Reclamation, and others.

He pointed out that it was the A.G.C. policy to deal only with matters of general principle, not with specific complaints, and to make recommendations based upon the practical experience of contractors which are of benefit to both the government and contractors. He estimated that sugges-

tions developed with the Bureau of Reclamation have saved the government \$100 million.

Mr. Henderson and Mr. DeButts followed with reports on activities of the task units with the Corps of Engineers and Bureau of Yards and Docks. F. S. Oldt, F. S. Oldt Co., Dallas, chairman of the municipal specifications task unit had completed standard municipal engineering contract forms which were approved.

A discussion developed, in which



Mr. Macdonald



Mr. Henderson



Mr. Cunningham

Officers of the Heavy Construction and Railroad Contractors Division for 1954 are A. S. Macdonald, Strong & Macdonald, Inc., Tacoma, Wash., chairman, and J. A. Henderson, United Construction Co., Winona, Minn., vice chairman. Retiring chairman is C. W. Cunningham, Condon-Cunningham Co., Omaha.

Radio Communications

The 35th annual convention passed the following resolution which originated in the Heavy Division:

The 35th annual convention of The Associated General Contractors of America, held in Los Angeles, March 1-4, 1954, commends the action taken by the association in protesting to the Federal Communications Commission certain proposed rules changes pertaining to the ownership and operation of mobile and fixed radio units by those engaged in construction as being discriminatory against the construction industry, and recommends that the opposition be continued.

government officials participated, on the wasteful effects on delays in handling correspondence and acting upon change orders, appeals or other contract matters. The division authorized a resolution subsequently adopted by the convention recommending that government agencies and contractors co-operate fully in handling expeditiously any change orders or disputes that may arise concerning their contracts.

Mr. Prichard reported that the Corps of Engineers is reviewing the equipment rental rate schedule adopted by the Department of Defense and is seeking concurrence of the other services in revising and liberalizing.

A discussion was held on the need for adequate advance planning of federal and other public works projects and the further need for continuing appropriations so that the construction

can be executed at an economical rate. The division authorized a resolution which later was adopted by the convention.

The division also supported a resolution which was adopted recommending that steps be taken to improve bidding and awarding procedures for subcontracts. Safety awards were presented by Robert M. Hoover, Kansas City Bridge Co., Kansas City.

Committee Discusses Municipal Problems

• Offner Addresses A.P.W.A.-A.G.C. Joint Meeting

» THE national joint cooperative committee of The Associated General Contractors of America and the American Public Works Association held an open meeting on February 27 in connection with the A.G.C. 35th annual

convention for public officials and contractors interested in municipal construction.

The committee completed work on the *Suggested Public Works Engineering Construction Forms* which had been developed for use on municipal engineering projects. These forms, consisting of suggested invitation to bid, instructions to bidders, proposal, agreement, and general contract conditions, were subsequently approved by the A.G.C. Contract Forms and Specifications Committee and by the convention.

Following a group discussion on the importance of inspectors and the need for increasing salaries to be commensurate with their responsibilities, the committee made a formal recommendation that in view of the difficulty experienced in obtaining inspectors meeting qualification requirements set up to include college degrees, practical experience be given equal consideration.

Milton Offner, secretary, Board of Public Works, Los Angeles, and president of the American Public Works Association, addressed the group on the difficulties in securing adequate financing for municipal public works, and urged contractors to accept their community responsibilities as citizens and help to secure such financing.

Speakers Report

F. S. Oldt, F. S. Oldt Co., Dallas, and R. M. Dixon, managing director, Texas Municipal Contractors Association, reported on construction councils which are being established in Texas for the purpose of promoting cooperation and understanding between engineers, architects, and contractors and for the dissemination of information on public works construction.

Mr. Dixon recommended that A.G.C. highway and heavy chapters establish municipal sections to give recognition to the interests of municipal contractors.

R. J. Hendershott, manager, A.G.C. of Minnesota, reported on the chapter's work in developing a standard guide to contract bidding and letting practices for municipal construction.

A presentation on municipal day labor practices by Orville W. Crowley, executive secretary, A.G.C. of Iowa, led to an extended discussion, after

KOHLER ENGINES

4-CYCLE AIR-COOLED



K90 3.6 H.P.
K160 6.6 H.P.
K330 12.0 H.P.
K660 26.8 H.P.

Kohler Engines are engineered and manufactured to the high standards which have made the Kohler mark known for quality the world over.

Power for garden tractors, pumps, sprayers, snow removal equipment, grain elevators, hoists, portable saws, concrete mixers, compressors, industrial lift trucks.

Write for information




Kohler Co., Kohler, Wisconsin
Established 1873

KOHLER OF KOHLER

PLUMBING FIXTURES • HEATING EQUIPMENT • ELECTRIC PLANTS
AIR-COOLED ENGINES • PRECISION CONTROLS

which the committee again made the recommendation that the contract method presents the most economical means of executing public works construction.

George Thompson, city engineer, Detroit, and C. Russell Ralph, Kaw Paving Co., Topeka, presided. J. M. Sprouse, manager, A.G.C. Heavy Construction and Railroad Contractors' Division, is co-secretary. He reported on actions of the committee during the year.

Financing Public Works

Mr. Offner in his address described the various types of financing for municipal public works construction. He highlighted the obstacles to securing approval of voters for bond issues by reporting that experience has demonstrated that one-fourth of the voters are opposed to any proposal. He concluded:

"Where do contractors fit into this picture? We all know that our republic is founded upon citizen participation in government. As a public official, I say to each of you that you



Municipal officials and A.G.C. representatives attending the national joint co-operative committee meeting of A.G.C. and the American Public Works Association included, left to right, seated, George Thompson, city engineer, Detroit, co-chairman for A.P.W.A.; C. R. Ralph, Kaw Paving Co., Topeka, Kans., co-chairman for A.G.C.; James M. Sprouse, manager, A.G.C. Heavy Construction and Railroad Contractors' Division, co-secretary; and D. A. Buzzell, assistant. Standing, left to right, are: J. A. Thompson, J. A. Thompson Co., Inglewood, Calif.; Lyall Pardee, deputy engineer, Department of Public Works, Los Angeles; F. S. Oldt, F. S. Oldt Co., Dallas, Texas; Albert D. Blakeslee, C. W. Blakeslee & Son, Inc., New Haven, Conn.; and Milton Offner, secretary, Board of Public Works, Los Angeles, and president, American Public Works Association.

owe it to your country and yourself to participate in the public affairs of your respective communities, including the financing of public works."

WHAT DOES IT TAKE TO LAND A BID LIKE THIS?

Skill, integrity and responsibility, to be sure. But often a *low* bond rate can be the *final* factor that tilts the bid in your favor.

So ask your Indemnity Agent to establish your credit line now with Indemnity Insurance Company of North America. This independent company offers the *lowest* bond rates* to contractors of *skill, integrity and responsibility*.

Indemnity's low bond rates save you money. An established credit line assures you of getting bonds on future jobs without delay. See your Indemnity Agent now.

*Sorry, Indemnity's low rates are not available in Louisiana and Texas.

Protect what you have®



Philadelphia 1, Pa.

**INDEMNITY INSURANCE COMPANY OF
NORTH AMERICA**

One of the North America Companies which are headed by Insurance Company of North America, founded 1792

Reclamation Bureau Is Anxious to Start Work on 'Great Many Projects,' Dexheimer States

- Commissioner Describes Upper Colorado River Project Needs
- Only 1.2% of 1953 Expenditures Go to Day Labor Operations

» THE BUREAU of Reclamation has "a great many" projects which it would like to get started, including the billion-dollar Upper Colorado River storage project, Reclamation Commissioner Wilbur A. Dexheimer told the 35th A.G.C. annual convention in Los Angeles last month.

Mr. Dexheimer also described the advance planning that is necessary to bring projects to the construction stage; the legal, political and other difficulties involved in such planning which cause delays; and steps being taken by the Bureau, in the face of such conditions, to conduct its operations on a "businesslike basis" as far as possible.

Upper Colorado Project

The first projects which the bureau desires to launch in connection with the Colorado program are Glen Canyon and Echo Park Dams, and 11 participating irrigation projects to utilize the water that would be stored, Mr. Dexheimer said.

"We have a great many projects now which we would like to get started. The Upper Colorado River report we may have difficulty getting authorized in Congress this year. Why? Simply because there are all over the country a great many sincere, honest people who believe that we would destroy or set a precedent for invading national parks and monuments."

Echo Park Problem

Referring to the Echo Park Dam in the Dinosaur National Monument as the particular objection along these lines, Mr. Dexheimer asserted that the dinosaur remains are at least 20 miles from the proposed reservoir, and that the only historical items that would be submerged are some Indian hieroglyphics in an isolated part of the canyon which is not easily accessible. The site was chosen, he asserted, after study of hundreds of locations, and would provide a firm power supply and save enough water to supply a town of 600,000 people due to the slower evaporation that would occur in the shaded site in a canyon 1,500 to 2,000 feet deep.

Mr. Dexheimer pointed out that

under Reclamation law, the bureau is required to return funds expended to the Treasury over a period of years, and that income is increasing faster than expenditures, with the result that no burden falls on taxpayers.

"In our 52 years of existence, we have spent a little over \$2.1 billion. A large percentage of that has been spent in the last eight or nine years, so those projects are not yet returning their full share to the Treasury. In spite of that fact, we have collected and put back into the Treasury \$510 million or over 25 per cent of the total money we have spent in the last 50 years. I can report too, at the present time, that we have less than 1 per cent of delinquencies. I think most businesses would be proud of a record of that type."

Not only are expenditures repaid, but completed projects have provided homes, opportunities, a stabilized economy in the areas involved, and "the income taxes alone each year in those areas more than repay the entire cost of the irrigation works," he added. "That again is mighty good business for the government."

Needs for Future Great

Speaking of the over-all need for conservation and reclamation, the commissioner stated, "We must think in terms of preserving our resources in the best possible way so they will be available for future generations. I think it is good business from a financial standpoint. As citizens interested in your country, I believe you should give some thought to proper use of our resources."

Mr. Dexheimer pointed out that the nation's population is expected to reach 200 million by 1975 and that growth is particularly heavy in the West, bringing added requirements for water, upon which the 17 western states are entirely dependent.

Irrigated Land Decreasing

"There actually has been a decrease in the amount of irrigated acreage in the United States over the past decade. Marginal land has been taken out of production. Industries and cities have grown up and taken good

farming land in their expansion. Development of irrigated land in the West has actually not been fast enough to keep up with the amount of land taken out of production in other parts of the country.

"In planning a project, we must take into consideration a great many things, the local interest, whether the local people want these things or not, whether they need them, and whether or not they can finance it themselves and go ahead and build it without federal assistance."

99% Contract Method

Mr. Dexheimer noted that the bureau, "as a matter of policy and practice does all of its work by contract. We find it necessary, of course, to do some emergency work, some small jobs, by day labor. Last year, that was 1.2 per cent of the construction money that we used, the other being done by contract entirely on a basis of competitive bidding."

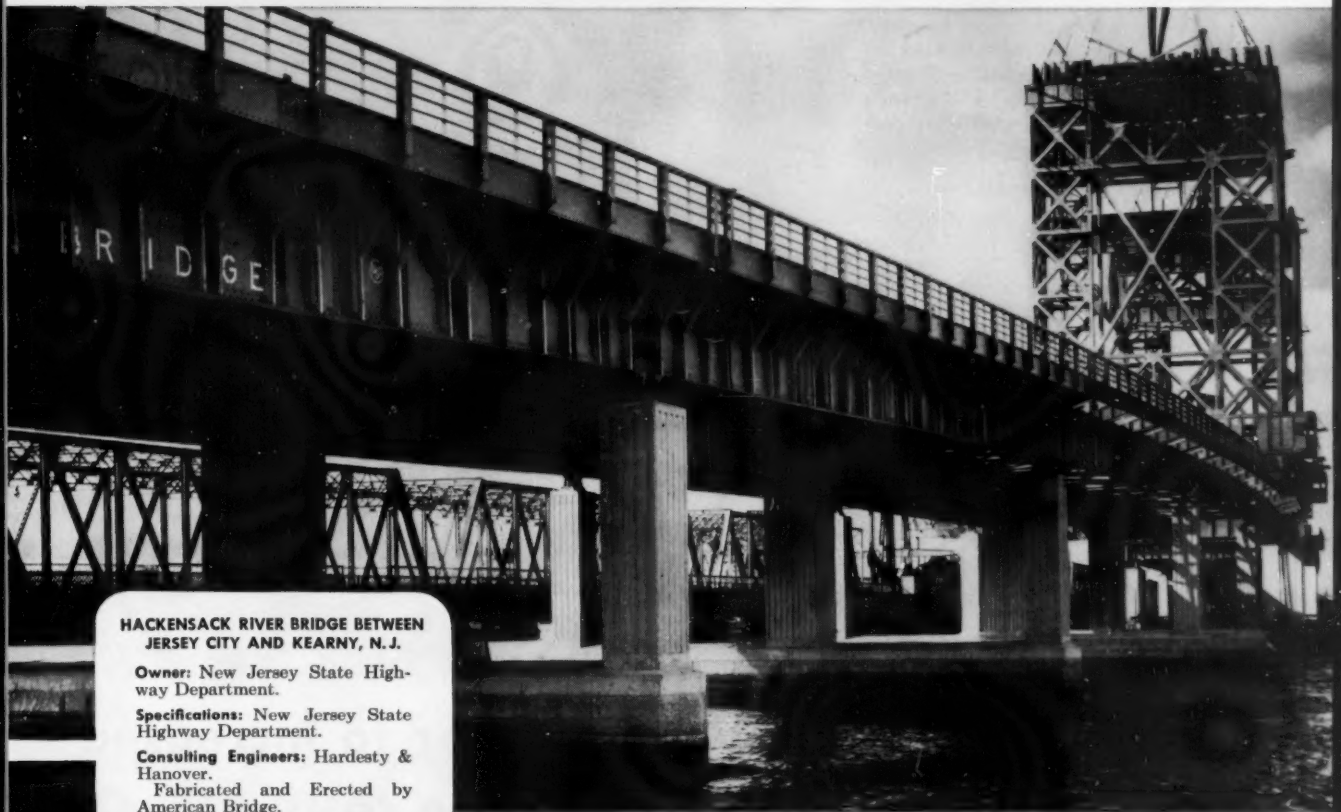
Describing the bureau's efforts to cut spending in line with funds appropriated, the commissioner said the agency in the past year has reduced its personnel from 13,000 to 10,500 with an annual saving of \$13 million, but that the reorganization has made operations more efficient.



Wilbur A. Dexheimer

"We are trying to overcome your legitimate objections to our slow methods of doing business and to our delays," he concluded. "Believe me, we are doing our best under the conditions that we have to face to make our business just as businesslike as yours."

AMERICAN BRIDGE spans the Hackensack again!



HACKENSACK RIVER BRIDGE BETWEEN JERSEY CITY AND KEARNY, N. J.

Owner: New Jersey State Highway Department.

Specifications: New Jersey State Highway Department.

Consulting Engineers: Hardesty & Hanover.
Fabricated and Erected by American Bridge.

*Providing broader roadways and wider channel,
new structure on U.S. Routes 1 and 9 between Jersey City
and Kearny speeds highway and river traffic!*

SPANNING the Hackensack is getting to be a habit with American Bridge. We've done it twice in less than two years. Completing in 1952 a 5613-ft. structure with a 375 ft. plate girder main span on the N. J. Turnpike near Laurel Hill, N. J.; and this year, building a new bridge over the same river on heavily travelled U. S. Routes 1 and 9 between Jersey City and Kearny for the New Jersey State Highway Department.

Replacing a lighter, narrower bascule bridge, the new wider, higher Hackensack River Bridge is an important contribution to both highway and river traffic in this busy industrialized area. The new bridge increases the channel width and

shortens operating time and traffic delays.

Carrying two 36-foot roadways, a 4-foot center mall, and two 6-foot sidewalks, this 1,480-ft. bridge is dominated by a 222-ft. thru truss lift span that is supported by towers 149' high and 81'4" wide. Seven thousand tons of structural steel were used in the bridge, all of which was fabricated and erected by American Bridge.

These Hackensack bridges are recent examples of American Bridge engineering, fabricating and erecting "know-how." If you would like to know more about the advantages of American Bridge construction, contact our nearest office.

AMERICAN BRIDGE DIVISION, UNITED STATES STEEL CORPORATION, GENERAL OFFICES: 525 WILLIAM PENN PLACE, PITTSBURGH, PA.

Contracting Offices in: AMBRIDGE • ATLANTA • BALTIMORE • BIRMINGHAM • BOSTON • CHICAGO • CINCINNATI • CLEVELAND • DALLAS • DENVER • DETROIT • ELMIRA • GARY
MEMPHIS • MINNEAPOLIS • NEW YORK • PHILADELPHIA • PITTSBURGH • PORTLAND, ORE. • ROANOKE • ST. LOUIS • SAN FRANCISCO • TRENTON UNITED STATES STEEL EXPORT COMPANY, NEW YORK

AMERICAN BRIDGE

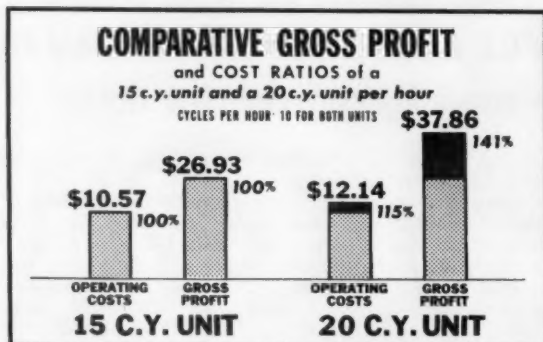


UNITED STATES STEEL

The 275 H.P. M-R-S 190 powering a scraper sideboarded to 19 c.y. struck capacity pusher loaded is shown securing a typically heavy payload on a highway construction project.



M-R-S tractors provide answer to increased competition and rising operating costs . . .



The data presented in the above chart was simulated to illustrate the value of higher capacity hauling units to the grading contractor. For purposes of fair comparison the two units are given credit for 10 cycles per hour each and ownership and operating costs were figured by a method generally accepted by the industry. Both units were given credit for a payload in the same proportion to the struck capacity of each.

As illustrated an increase in operating costs of only 15% for the 20 yard unit results in an increase in estimated gross profit of 41%

In the face of spiraling operating costs and heavy competition M-R-S tractors provide a bright spot on the horizon for the grading contractor. Embodied in the entire line of M-R-S heavy diesel wheel-type tractors is a principle of operation that offers the contractor more cost cutting possibilities than ever before.

M-R-S tractors cut production costs in three primary ways. **First**, they provide the power and tractive ability to tow larger scrapers thus exacting greater production per man hour — more production per dollar of capital invested. **Second**, M-R-S tractors are designed for greater *usable* speed for more cycles per hour — more dirt on the fill at the end of the day. **Third**, M-R-S tractors minimize the problem caused by the inability of big hauling units to turn and maneuver in narrow cuts and fills.

These three factors mean less operating costs to charge to each yard of dirt moved for successful bidding with a fair profit on the job.

M-R-S tractors can also mean a great saving in initial investment because they can be used to power any four wheel cable scraper in current use



Shown above is the 275 horsepower M-R-S 190 and a 19 cubic yard scraper in a turn. Since the tractor turns up to 135 degrees in relation to the scraper contractors can now use extra large hauling units even in narrow cuts and fills.

Bonus profits are made possible by the M-R-S principle of operation since the tractor is not permanently "married" to the scraper. When the need arises the big rugged M-R-S prime mover can be quickly detached from the scraper and used to power heavy compaction rollers, rippers, machinery trailers and for numerous other towing jobs that may arise.

M-R-S tractors are manufactured in three sizes from 125 horsepower to 275 horsepower for selfloading 8 cubic yard to 12 cubic yard struck capacity scrapers and for powering 13.5 to 20 yard struck capacity scrapers pusher loaded.



M-R-S tractors can be quickly unhooked from the scraper and used for powering other important construction tools like the ripper in the above photograph. If necessary, the scraper can be temporarily powered by a crawler for finishing and sloping.



The versatility of M-R-S tractors is again demonstrated in the above photo of an M-R-S 190 powering a 50 ton compactor.



The exclusive patented M-R-S hydraulic weight transfer system makes possible the use of big low pressure drive tires on all M-R-S tractors. When added traction is needed for loading scrapers or negotiating loose or spongy surfaces, weight is borrowed from the front of the scraper and the drive tires are flattened until their ground contact area is increased approximately 60 per cent. This is the reason why M-R-S tractors can power such large scrapers as the 23 yard struck capacity unit shown above.

*Investigate before
you invest!*

THE CONSTRUCTOR, APRIL 1954



Write today for details on the M-R-S answer to your earthmoving problems.

MANUFACTURING COMPANY

P. O. BOX 1206, JACKSON, MISSISSIPPI, U.S.A.

A.G.C. Division Acts on Problems Confronting Highways, Airports

- Hears Public Roads Officials, A.A.S.H.O. Head
- Reports to Meeting Considered Optimistic

» THE Highway Contractors' Division met during the convention and discussed many problems concerning road construction and heard generally optimistic reports from many authorities in the highway field.

In discussing the Bureau of Public Roads' program, Raymond Archibald, division engineer at San Francisco, told the contractors what steps the bureau is taking to operate its program more efficiently.

Bureau Commissioner Francis V. duPont, in a letter to the convention, said his agency has recently modified requirements that contractors keep payroll statistics on federal-aid projects. Mr. DuPont was unable to attend the meeting in person because of pressing matters in Washington.

Johnson Addresses Division

A. E. Johnson, president of the American Association of State Highway Officials and chief engineer of the Arkansas state highways, addressed the meeting on "Adequate Highways for a Prosperous America." (High-

lights of Mr. Johnson's remarks are covered on pages 86-87.)

In his report Arch N. Carter, division manager, national staff, forecast a 10% increase in the volume of new highway construction this year. Because of the large backlog of needed highways, road construction should continue high for the next 10 years, he said.

Mr. Carter also noted that the A.G.C. last year continued to support the federal-aid highway program. The association's position on this question was made known to the national Chamber of Commerce, congressional committees, and at meetings of highway officials.

Portions of President Eisenhower's State of the Union message, which call for continuation of the federal-aid program and the retention of the 2-cent federal gasoline tax, were read by Mr. Carter.

He also reported the status of certain highway legislation in Congress which would increase the total amount of federal aid to the states.

On diversion of highway funds, Mr. Carter said that the A.G.C. last year had worked through its chapters and with other groups to get more states to adopt laws prohibiting the spending of highway money for other purposes. At present there are only 24 states with such rulings.

Toll roads, Mr. Carter added, continue to play a prominent role in highway construction. This year will see 1,100 miles of such roads built at a cost of \$1.5 billion.

Resolutions Recommended

The meeting also heard a report from the joint cooperative committee of the National Association of State Aviation Officials and A.G.C. which met two days before the convention began. Max C. Harrison, Harrison Construction Co., Pittsburgh, co-chairman, said that the group favored reinstatement of the federal-aid program for airports which was abolished recently. (A full report of this meeting appears on page 84.)

The following resolutions were recommended at the meeting: (1) set a minimum of not less than \$900 million annually for federal-aid highways, called for administration of federal-aid program through present channels, and sought to end diversion of highway users' taxes by all units of government; (2) recommended that the A.G.C. work with the American Society of Civil Engineers to bring the salaries of public service engineers up to the level of their responsibilities; and (3) urged the Secretary of Labor to maintain the "historic differentials" between building and highway construction wage scales, to give "realistic consideration to wage scales prevailing in a given locality in predetermining and enforcing the prevailing scales of minimum wages for federal construction projects."

The recommendations were incorporated in resolutions subsequently adopted by the A.G.C. general convention.

The division also endorsed the N.A.S.A.O.-A.G.C. Joint Cooperative Committee's recommendation for increased financing of airport construction, and endorsed the resolution formulated in the Building Contractors' Division concerning subcontract bids and relations between general contractors and subcontractors.

New officers elected and installed at the Highway Division meeting included M. Clare Miller, San Ore Construction Co., McPherson, Kans.,



Division officers: M. Clare Miller, center, San Ore Construction Co., McPherson, Kans., newly-installed chairman of the Highway Contractors Division, is congratulated by P. M. Thornton, left, Thornton Construction Co., Hancock, Mich., retiring chairman and J. L. Ewell, Ewell Engineering and Contracting Co., Lakeland, Fla., the new vice chairman.

chairman, replacing P. M. Thornton, Thornton Construction Co., Hancock, Mich.; and J. L. Ewell, Ewell Engineering and Contracting Co., Lakeland Fla., as vice chairman.

Meets With A.A.S.H.O.

The joint cooperative committee of the A.A.S.H.O.-A.G.C. met during the highway meeting and discussed highway financing, including federal aid and toll roads, and the contracting industry's ability to handle the larger road construction program expected in the future.

Also discussed by the joint cooperative committee was the Chamber of Commerce's policy on the national highway construction program. The meeting was directed by George T. McCoy, California state highway engineer, acting co-chairman; and George C. Koss, Koss Construction Co., Des Moines, Ia., A.G.C. co-chairman.

Mr. Thornton presided over the Highway Division meeting which over 175 A.G.C. members attended. Representing the national staff at the meeting in addition to Mr. Carter was Daniel K. Donovan, Highway Division assistant.

The names of 13 A.G.C. highway firms were announced at the meeting as winners of association accident prevention awards last year. In making the announcement C. J. Carroll, executive secretary of the Michigan Road Builders Association, A.G.C., outlined large savings that can be realized by an effective accident prevention program.


Recent AASHO-AGC Meetings

Increased federal aid can be utilized promptly by state highway departments, the contracting industry can handle a much larger construction program, and keen competition prevails in bidding, regional meetings of the A.A.S.H.O.-A.G.C. Joint Cooperative Committee, held subsequent to the A.G.C. convention, have concluded.

The conferences were held March 6 in connection with the annual meeting of the Mississippi Valley Conference of State Highway Officials in Chicago, and on March 11 in Washington, D. C., during the meeting of the Association of Highway Officials of the North Atlantic States.

Much emphasis was placed on savings that could accrue from the acquirement by highway departments of right-of-way on the schedule desired, or in advance of construction.

FOR MASS PRODUCTION IN MACADAM CONSTRUCTION!



THE
JACKSON
ELECTRIC
VIBRATORY
COMPACTOR

QUICKLY COMPACTS
AND FILLS
ROCK COURSES
OF REQUIRED
THICKNESS!

• WORKING SPEEDS:
0 TO 60 FT. PER MIN.

• REVERSE TRAVEL SPEED:
5 1/2 M.P.H.

MACADAM

The JACKSON — in one pass — will sufficiently compact 12 inches of rock to support smooth rollers. In four passes, the JACKSON keys and compacts to final density. It takes just two passes for the JACKSON to completely fill voids from top to bottom of the course, when enough dry fines are spread on top in one application.

IN GRAVEL SUB-BASES

(Blanket Course) 7" thick, at optimum moisture, the JACKSON in one pass has obtained densities exceeding 100% Standard Proctor. Vibratory frequency may be varied to suit conditions.

FLEXIBLE

The JACKSON is available in a standard width of 13', 3". Units may be subtracted on the job to meet conditions requiring narrower widths. The 26" units can be detached and fitted with handles, providing self-propelled compactors for restricted areas, pavement patching, paving drives, compaction of granular soils in trenches, etc.

WIDENING STRIP COMPACTED IN ONE PASS

With simple equipment available, compactors may be assembled in tandem, 3 deep and in single or double row, and towed at the side of the tractor to give complete compaction of widening strip in one pass in all granular materials used for flexible base-course widening. Compactor bases of 12" width and up may be substituted for the standard 26" bases to fit any widening requirement.

See

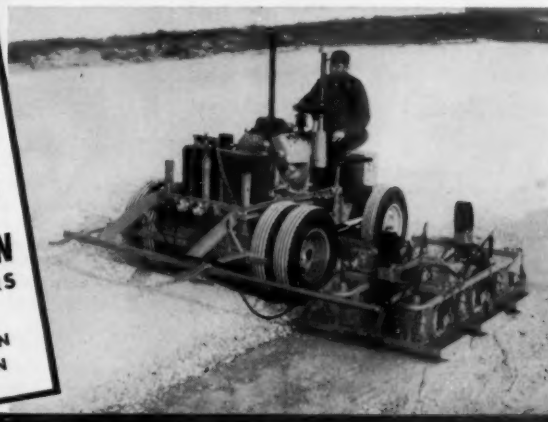
**YOUR JACKSON
DISTRIBUTOR**

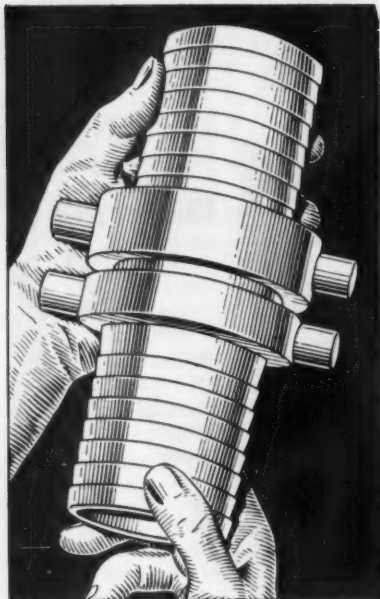
OR WRITE

to us for details of
this extremely ver-
satile, multi-pur-
pose, money-mak-
ing equipment.

**JACKSON
VIBRATORS
INC.**

LUDINGTON
MICHIGAN





"KING" Shank Coupling

This is the Shank Coupling which the Construction Industry and all other users of suction and water hose rely on for long, reliable service, regardless of rough handling.

The "KING" is a brute for punishment, yet thoroughly refined in every detail of manufacture... absolute uniformity in quality, dimensions and threading... well defined, smoothly finished corrugations. Made in light and heavy patterns, in all-malleable iron, plain or plated; all-brass; and plain or plated malleable iron shanks with brass swivel nut. Size range from 1" to 8", inclusive.

Stocked by Manufacturers and Distributors
of Industrial Rubber Products

DIXON
Valve & Coupling Co.
GENERAL OFFICES & FACTORY—PHILADELPHIA 22, PA.
BRANCHES—CHICAGO - BIRMINGHAM - LOS ANGELES - HOUSTON
DIXON VALVE & COUPLING CO. LTD., TORONTO Associate Companies:
Rock Iron Company, Inc., Quarryville, Pa. - Precision Drawn Steel Company, Camden, N.J.

HIGHWAYS • AIRPORTS

Joint Committee Stresses Airport Needs

• Study of Requirements by Governmental Agencies Proposed

» BECAUSE construction of adequate airport facilities for the rapidly growing air transportation industry of the United States is of great importance to the national economy and to the national defense, appropriate federal, state and local agencies should give serious study to the adequacy of construction programs of civilian airports and air navigation facilities.

This was one of the major conclusions reached by the joint cooperative committee of the National Association of State Aviation Officials and The Associated General Contractors of America at its meeting on February 27 held in connection with the A.G.C. 35th annual convention.

Needs Volume Great

It was stressed at the committee meeting that many badly needed civilian airport projects remain to be completed, and that the volume of needed improvements is large and of great importance. The Civil Aeronautics Administration of the Commerce Department announced in March that it had requested an appropriation of \$33 million to continue the federal aid airport construction program for the fiscal year starting July 1.

The committee recommended that an early meeting be held of N.A.S.A.O. and A.G.C. representatives with Department of Commerce officials to dis-

cuss progress in the airport construction program, and to make known the views of the organizations.

R. W. F. Schmidt, manager, Tuscon Municipal Airport, a member of the Airport Panel of the Transportation Council of the Department of Commerce on the Growth of the United States Airport System, outlined the panel's report, The National Airport Program, in which it found that:

1. Civil airports are public facilities of vital importance to the commerce and security of local communities and of the nation as a whole.

2. The ability of the airplane to serve the public varies in direct proportion to the number and functional adequacy of airports strategically located in the United States and its possessions.

3. The state, municipalities, and other local political units alone are unable to carry the capital investment burden involved in providing an adequate system of national airports.

Therefore, it was the unanimous opinion of the panel that it is the responsibility of the federal government to give financial assistance to local governments in developing airports which are in the national interest, Mr. Schmidt reported.

Discussion was given to a revision of the Federal Airport Act.



Aviation officials and A.G.C. representatives attending the joint cooperative committee meeting of A.G.C. and National Association of State Aviation Officials at Los Angeles, February 27, are shown, left to right, seated: George E. Johnson, Civil Aeronautics Administration, Los Angeles; A. N. Carter, A.G.C. national staff, co-secretary; Norman C. Bird, Illinois Department of Aeronautics, Springfield, co-chairman; Max C. Harrison, Harrison Construction Co., Pittsburgh, co-chairman; and Joseph S. Marriott, CAA Regional Administrator, Los Angeles.

Standing: Daniel K. Donovan, A.G.C. national staff; H. K. Friedland, aviation consultant, Los Angeles; R. W. F. Schmidt, Tuscon Airport Authority; W. D. Amis, Amis Construction Co., Oklahoma City; M. Clare Miller, San Ore Construction Co., McPherson, Kans.; E. G. Werentin, Lytle-Green Construction Co., Des Moines; and Charles J. Winger, CAA, Los Angeles.

**Command the market
for
low-cost aggregate
with the**

Cedarapids
Built by
IOWA

Commander



TODAY, as never before, you need big volume output *and* low-cost production to command the market for aggregate.

That's what you get with the Cedarapids Commander!

The Commander Plant shown above produced between 300 and 400 tons per hour of 1 1/4" material with 20% crushing, and the two draglines feeding it couldn't keep it up to full capacity!

Low maintenance and operating costs, the result of Cedarapids-Quality construction and field-experienced design, keep production costs at absolute minimum.

For today's stiff competition, the producer who turns out *more* tons per hour, at *less* cost per ton, is top man on the profit pile.

Ask your Cedarapids distributor to show you all the Commander advantages.

HERE'S WHY YOU MAKE MORE PROFIT WITH THE COMMANDER

- Big 30' x 22' Roll Crusher provides the increased secondary crushing capacity required for meeting today's specifications for smaller sizes of crushed aggregate.
- Large 48' x 10' Horizontal Vibrating Screen gives extra screening capacity to balance the greater roll crusher output.
- 30" wide conveyors throughout the plant easily handle the high capacity. The Commander is designed to eliminate any possibility of bottlenecks.
- You get this increased capacity with no increase in maintenance or operating costs! That's the Commander's profit-benefit to you.

WRITE TODAY FOR BULLETIN COM-1

It contains complete details of all the features that make the Commander "the plant of the year" for low-cost aggregate production.



IOWA MANUFACTURING COMPANY

Cedar Rapids, Iowa, U. S. A.



Master Bituminous
Mixing Plant



Vibratory Soil
Compactor



Motorized
Head Pulley



Model G-60 - 6000-lb.
Bituminous Mixing Plant

Educate Public to Roads Costs A.A.S.H.O. Head Tells Meeting

- Let People Decide on Size of Program to be Built
- \$50 Billion Needed to Bring Highways Up to Date

» THE ONLY bright spot in an otherwise dark picture of the nation's highway system is the fact that highway officials no longer have to produce factual data to prove their point that the condition of U. S. roads is critical, A. E. Johnson, president of the American Association of State Highway Officials, told the A.G.C. Highway Division meeting at the Los Angeles Convention. Today's problem is to show the public how much more it costs not to have the needed roads.

Mr. Johnson, who is chief engineer of the Arkansas State Highway Commission, said that the nation's motorist is the victim of what highway officials saw coming several years ago now that he is being stalled bumper to bumper in city traffic congestion.

"He has been caught in long lines behind slow-moving vehicles on functionally obsolete and broken-up rural mainline highways that are being called upon to carry densities and loads never anticipated when the roads were constructed.

"If Mr. Motorist is a rural resident, his living standard is very similar to his city cousin and he wants dustless roads for his comfort and so that he may transport his produce to market in a minimum of time and with a minimum of damage," he stated.

Education Is Solution

The solution to this problem of better roads lies in education—letting the public know how much it costs not to have adequate highways, and then letting the people decide how much of a highway program they want to buy.

In 1919, at the time of the first A.G.C. convention, there were some 7.5 million motor vehicles in the United States, and the great road building programs were just beginning, Mr. Jackson told the meeting. Today there are 55 million motor vehicles traveling on 3.2 million miles of public roads, he added.

To show how this country depends on motor travel, Mr. Jackson cited the following statistics: 75% of all freight and 90% of all farm produce



A. E. Johnson

is moved partly by truck; 60% of auto travel is for business; 73% of workers in cities go to work in cars and 30% of students travel to school by bus; 63% of farms have cars and 34% have trucks.

Also, between 1940 and 1950 auto registration increased 45% and truck registration, 80%; ton miles of freight hauled on rural arterial roads increased 152% over same period.

"The increase is still in progress and trends indicate 80 million vehicles by 1975 if roads and streets can be provided to accommodate them. We are about to reach the point where if adequate highways are not provided the future restricted use of the motor vehicle is not an impossibility.

Outmoded System

"Basically we are operating the same road and street systems that existed in the middle '30s when there were only half the number of motor vehicles as now," Mr. Johnson continued.

Highway revenues have doubled but so have costs, therefore nothing has been gained financially. In addition to this, the speaker added, roads of today must be flatter, straighter, wider and thicker to satisfy the traffic demand caused by more, faster and heavier trucks.

World War II was blamed partly for the poor conditions of roads when the government shut off materials and equipment for replacement construction and protective maintenance, while at the same time increasingly heavier loads were adding to the breakdown.

Mr. Johnson quoted a figure of \$50 billion as one that would bring the nation's total highway system up to date. The cost estimate for bringing the federal-aid system up to par is said to be near \$35 billion, according to recent estimates by the A.A.S.H.O. This would require an annual expenditure of \$3.5 billion for 15 years to accomplish this, considering the needs that would accrue during this time.

\$1.5 Billion Federal Aid

He added that at the present time only \$1.5 billion is being spent on the federal aid system and about \$2.4 billion on total highway systems.

"Yes, we are falling behind in highways and the people need these data to determine how much highway plant they desire to buy. Users are paying billions in damaged produce, additional operating costs, fatalities, property damage and time lost by not having adequate highways. This serious lack of highways in the more populous parts of the nation, especially where existing facilities are obsolete, has given impetus to toll roads.

"It is my feeling that the toll method of financing is only one way of building and operating roads and possibly the public should give some consideration to the economics involved. The A.A.S.H.O. has not yet adopted an official policy or attitude on toll roads," Mr. Johnson added.

In referring to the interstate highway system, Mr. Johnson said that extension of this important road segment "would automatically eliminate a large share of the more critical traffic deficiencies. This system occupies a place of extreme importance because of the role it could play in the national defense, civil defense and the peacetime economy of our country."

The present length of this system is 38,000 miles and by law it can not exceed 40,000 miles. It constitutes 1% of the public road mileage, though it carries over 20% of the nation's traffic. In addition, Mr. Johnson stated, it joins 42 state capitals and connects 156 of the 164 cities of over 50,000 population.

On highway accidents he said that close to 40,000 people are killed each

year, with an additional 1.5 million persons injured. Property damage totals \$3 billion and insurance premiums cost about the same. President Eisenhower, opening the recent White House Highway Safety Conference said that the automobile has been responsible for killing more people in the last 50 years than were killed by all the wars in our nation's 177-year history.

"So it would seem," he said, "that the key to unraveling our highway dilemma, both from the standpoint of adequately financing . . . safe roads, must be accomplished in acquainting the public with the price tag for adequate highways and the penalty for not having such facilities."

Reviews A.A.S.H.O. Policy

He reviewed an A.A.S.H.O. policy statement adopted last November in Pittsburgh which asked Congress to return to the states in the form of federal aid for highways at least \$900 million annually during the next two years. This figure would include \$650 million for primary, secondary, and urban roads to be apportioned in the same proportions as now set up by federal formulas. A.A.S.H.O. also requested \$250 million for the interstate system to be apportioned according to population, and to be matched on a basis of 75% federal and 25% state funds.

Such a matching ratio was requested because of the high standards of the interstate system and of the high priority the federal government should have on it in view of the large amount of interstate travel. Also, federal aid funds do not apply to maintenance of this system, which is the obligation of the various states, he added.

Highway Legislation

The A.A.S.H.O. called for apportioning on the population basis because it was discovered that one half of the estimated cost of the interstate system is in eight states, California, Texas, Illinois, Ohio, Michigan, Pennsylvania, New York and New Jersey. The population of these states represents 48% of the nation's total, but the states currently get only 33% of the apportioned money, Mr. Johnson said. The highway officials wanted to arrive at a formula that would distribute money in proportion to the need and the applicable design standards in order that the rate of improvement could progress uniformly in all of the states and be a useable entity in all the states at the same time.

"The policy itself was really shooting for the return to highways of at least as much money as is currently being collected by the controversial two cent federal gasoline tax. However we do not subscribe to the theory of linkage, as it might be possible that in the case of a recession there should be more money placed into highways than the two cent gasoline tax might earn. We believe that the money allotted to highways should be on the basis of need and not tied to any particular source of revenue at the federal level," he added.

In considering highway legislation in Congress, Mr. Johnson reviewed the Administration's McGregor bill in the House which calls for \$600 million annually in the next two years for primary, secondary and urban roads and \$200 million for interstate highways on a 50-50 matching ratio, and to be apportioned one half on the old federal aid primary formula and one half on the population formula. The bill also would make the \$200 million for interstate highways contingent on the federal gasoline tax remaining at 2 cents. There is a strong possibility that the matching ratio might be changed to 60% federal and 40% state, he added.

Other portions of the bill mentioned by Mr. Johnson included money for forest highways, forest development roads and trails, park roads and trails, national parkways, and some of the Pan American highway commitments.

Case Bill Cited

On the Senate side, he said, the Case bill which was recently under consideration called for \$360 million annually for primary, with not less than \$100 million for interstate roads on a 60-40 basis; \$240 million for secondary, and \$200 million for urban, including \$65 million for circumferential and radial urban routes as needed for national defense.

The Case bill would also increase the interstate mileage from 40,000 to 50,000 miles, and provide for the Pan American commitment similar to the McGregor bill. Mr. Johnson added that Senator Edward Martin, chairman of the Senate Public Works Committee has introduced a companion bill to the McGregor bill.

"You can see," he said, "that the Congress is thinking of more money for highways, something in the neighborhood of the amount that is earned by the federal gasoline tax."

[Editor's Note: The A.G.C. has

repeatedly asked that there be no diversion to other uses of taxes collected from highway users by any unit of government.]

Praises Joint Committee

The people in the A.G.C. and the A.A.S.H.O. can look with pride upon the accomplishments made in highway construction in the last 35-40 years. This period represents what has been done to date on highways, he said. However, anything as dynamic as motor transportation cannot remain static. Highway programs and motor transportation must either advance together or lag behind.

Praise was given to the A.G.C.-A.A.S.H.O. joint cooperative committee which he called "extremely valuable" in providing the opportunity for both sides to sit down and discuss mutual problems.

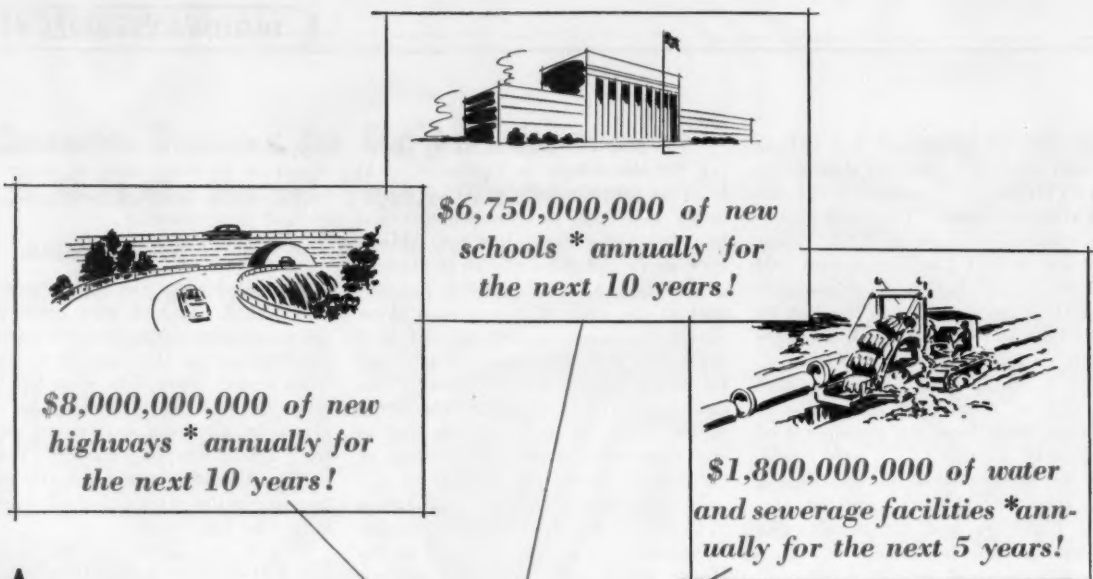
Mr. Johnson also praised A.G.C. Vice President George Koss, Des Moines, for appearing before the House Public Works Committee in February and testifying that funds in the McGregor bill should be considered a "bare minimum" and that the contracting industry has the capacity to carry on an enlarged road program.

In Summary

In summing up his remarks, Mr. Johnson said: "Any enlarged road program can be most efficiently and expeditiously constructed by . . . competitive bidding and the contract method and should be administered by the state highway departments.

"In conclusion I will say that with the current highway needs and with the current thinking, an enlarged highway program is a sure thing in the not too distant future. Adequate highways are a necessity for a prosperous America. We are so very dependent upon the motor vehicle that we must go forward with our highway program. In this nation distances are great, production is staggering, and farms produce an abundance of food. These things must be transported economically and conveniently or else transportation costs can destroy created values.

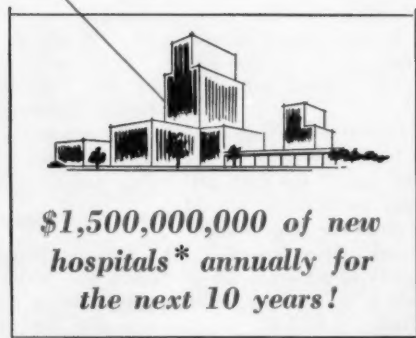
"The people will decide that it is costing too much not to have the highways they need and public opinion at that time will demand and endorse an action program for giving us the adequate and safe highway system that this country so sorely needs to keep its economy healthy and its defense secure."



America's community needs ...they can be met now

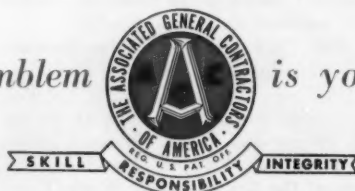
The construction industry *now more than ever* has the capacity and experience to build these needed facilities quickly, efficiently and economically.

The general contractor who displays the A. G. C. emblem has the proven Skill, Integrity and Responsibility to execute and coordinate the construction operations.



*Minimum annual community needs as reported to the Congress by the President in his Economic Report, January 28, 1954

The A.G.C. Emblem is your assurance



The ASSOCIATED GENERAL CONTRACTORS of AMERICA, Inc.

Representing more than 6,500 of the Nation's Leading General Contracting Firms of Proven Skill, Integrity and Responsibility —
Engaged in the Construction of Buildings, Highways, Railroads, Airports, Public Works, Defense Projects

NATIONAL HEADQUARTERS, MUNSEY BUILDING, WASHINGTON 4, D. C.

America Progresses Through Construction . . . Construct by Contract!

» MEMBERS of the A.G.C. Building Contractors' Division met in Los Angeles during the association's 35th annual convention.

They continued firm in their opposition to the passage of S. 848 and H. R. 1825, proposed legislation that would require general contractors on federal projects to name in their bids their subcontractors and the amounts of their offers.

But the A.G.C. builders also backed heartily a course of action designed to help improve, where necessary, the procedures for receipt of bids and award of subcontracts and to foster cordial relations between general contractors and subcontractors.

Endorse Resolutions

Resolutions opposing the proposed bills and setting forth four steps by which general contractors and the A.G.C. locally and nationally can voluntarily act to secure more widespread observance of the recognized ethical practices of the industry by all those engaged in it in the bidding and award of subcontracts, were endorsed by the builders and adopted by the convention.

During the builders' meeting, Frank J. Rooney, of Miami, Fla., was elected 1954 chairman of the Building Contractors' Division to succeed Frank F. Burrows, Burlingame, Calif. James W. Cawdrey, Seattle, was chosen vice chairman of the division.

Builders Back Convention Stand On AGC-Subcontractor Relations

- Elect Rooney, Cawdrey To Head Division in 1954
- Express Concern Over Rising Compensation Rates

In recommending the four-fold plan, Earle J. Wheeler, Cincinnati, chairman of the A.G.C. Subcontractor Relationships Committee, said:

"The A.G.C., members and chapters during the past year have taken vigorous action in opposition to the proposed Federal Construction Contract Act (S. 848 and H. R. 1825) in the sincere and genuine belief that it is detrimental to the best interests of the construction industry, the government and the public."

Declaring that passage or rejection of the act would not contribute anything constructive to the situation, Mr. Wheeler added:

"Representatives of the association consistently have stated that these problems can be solved for all kinds of work more effectively and more satisfactorily within the industry than by the proposed legislation which applies directly only to federal public works."

Plan for Subcontracts

Accepting the Subcontractor Relationships Committee's suggestions, the

A.G.C. convention later resolved to:

1. Encourage A.G.C. chapters to adopt programs in cooperation with local associations of subcontractors in subscribing to the A.G.C. Code of Ethical Conduct for bidding and awarding of subcontracts; purchase of materials and supplies.

2. Endorse the development and adoption of suggested A.G.C. "Invitation To Bid Forms" based upon the A.G.C. Code of Ethical Conduct, which general contractors may use or adapt in principle to their own use in inviting bids for subcontracts. The officers and Executive Committee are authorized, upon recommendation of the appropriate A.G.C. committees, to adopt the suggested forms and have them distributed for the information of members and chapters.

3. Encourage A.G.C. chapters to establish committees, which may invite participation by representatives of local subcontractors' associations appropriate to a particular case, empowered to hear charges of violation of the code and to make findings of fact.

4. Authorize the officers and Executive Committee to undertake such cooperative actions with national associations of subcontractors as they deem appropriate in helping to establish and maintain better relationships between general contractors and subcontractors.

If experience demonstrated that these steps were helpful, said Mr. Wheeler, additional actions could be recommended.

Insurance Rates Discussed

Other subjects discussed by the building division included: excessive compensation insurance rates, representation of the building division on the A.G.C. Bureau of Yards and Docks Specifications Task Unit, apprenticeship, accident prevention, national cooperative committees, participation in the work of the Building Research Advisory Board, and prospects for building construction in 1954.

A.G.C. chapters and members,



Frank F. Burrows, left, retiring chairman of the Building Contractors' Division, discusses the convention program with his successor, Frank J. Rooney, center, and James W. Cawdrey, newly-elected 1954 vice chairman.

whose concern over increasing compensation insurance rates is mounting as rapidly as the rates themselves, were advised during the meeting to investigate the situation at its source—within their respective states.

In counseling this course of action, building division members pointed out that any measures to fight the trend to higher rates would have to be taken in the states since it was a matter covered by state law.

In reporting the results of a study made of the situation, Welton A. Snow, manager of the building division, said there appeared to be four reasons for the steady rise in compensation insurance rates:

- a. state courts and compensation insurance boards are awarding increasingly large payments.
- b. state approval of increased disability benefits.
- c. inattention to rehabilitating the injured workmen.
- d. uncontrolled malingering.

"It is interesting to note," said Mr. Snow, "that President Eisenhower has emphasized the need of an increase in hospital facilities, rehabilitation centers and special workshops for the rehabilitation of the disabled.

"Bills have been introduced in Congress to this effect and if passed, money will be appropriated to state governments, promoting increased financial cooperation from the states. By 1959 equal sharing in the financing of state rehabilitation centers by the federal government and the states should be reached.

"By this program the government hopes to restore many more disabled persons to productive lives, the cost of which will be offset by the taxes this rehabilitated group will pay back to the government.

"If these recommendations are accepted by Congress, state governments and the public, it is anticipated that they will be helpful in keeping compensation costs to the employer stabilized."

Another good year for building construction with highly competitive conditions continuing was foreseen by the division members. In his report on market conditions for the coming year, Mr. Snow said a boom in commercial construction is anticipated. He added that the trend toward residential development in suburbs and outlying areas is expected to continue, carrying with it a demand for all types of construction needed for community facilities and services.

Mr. Snow's report on market conditions was part of his overall annual staff report on activities of the Building Contractors' Division. Assistance in the compilation of the report was rendered by Jack K. Bowersox, assistant in the building division.

Progress In Safety

Continued progress in accident prevention among members of the division was reported by A. L. Jackson, of Chicago, a member of the A.G.C. Accident Prevention Committee. Mr. Jackson emphasized the importance of carrying on accident prevention programs on the part of every general contractor.

Safety awards were presented to the following: Blaw-Knox Construction Co., Pittsburgh; John H. Sellen Construction Co., Seattle; The Schirmer-Peterson Co., Cleveland; Bryant & Detwiler Co., Detroit; J. B. Warrack Co., Seattle, and H. B. Alexander & Son, Inc., Harrisburg, Pa.

Frederic G. Krapf, of Wilmington, Del., chairman of the A.G.C. Apprenticeship Committee, stressed the need for continued cooperation of contractors in training young men for the industry. Mr. Krapf reported that a plan calling for intensification of this activity among A.G.C. members is being formulated.

Task Unit Appointed

In line with a recommendation of the building division made at the 1953 annual convention, Mr. Snow reported that A.G.C. building contractors are represented on the Bureau of Yards and Docks Specifications Task Unit of the A.G.C. Contract Forms and Specifications Committee.

(1954 building representatives on the unit named after the meeting, are G. C. Farnsworth, R. P. Farnsworth Co., New Orleans; E. F. Madison, Wm. Muirhead Construction Co., Durham, N. C., and Erik K. Sanders, Sanders Construction Corp., Portland, Maine.)

ALWAYS ASK FOR

STEEL BY FLINT



**STEEL
ERECTION
FABRICATION
DETAILING**

If you need steel, any kind of steel—structural, galvanized, reinforcing bars and mesh or pans—ONE Call to Flint will secure it. DELIVERY can usually be made from our full stocks.

• STRUCTURAL	• PLATE
• WAREHOUSE	• REINFORCING
• GALVANIZED	

FLINT STEEL CORPORATION

P. O. BOX 1289 TULSA, OKLAHOMA

Labor developments were reported to the meeting by W. E. Dunn and E. T. Kelly, manager, labor relations, and labor service advisor respectively, of the A.G.C. national staff.

College Bond Issue Taken

The first issue of college housing bonds to be issued under the Housing and Home Finance Agency's new policy of encouraging maximum degree of private participation in college housing loans has been purchased by two private investment firms of Denver, Col.

The investment houses submitted a combined bid for \$181,000 worth of a total bond issue of \$575,000 offered by Western State College, at Gunnison, Col., for the construction of a dormitory. The bonds were bought at 3.6% interest and under the terms of a HHFA conditional contract with the college, the government will purchase the remainder of the issue, \$394,000, at 3.5%.

Started Program in July

Under the new procedures inaugurated by HHFA last July the government will make a conditional bid of par at 3.5% interest provided that the college issuing the housing bonds does not receive a bid of par at 3.6% or lower rate of interest. The previous rate of government interest had been 3%. Five other college housing loans have been approved by HHFA under its new program. Four of the colleges have yet to float bond issues. Bids for an issue made by the fifth college were opened too recently for details to be known.

HHFA Administrator Albert D. Cole said, "We are very gratified that the first issue of college housing bonds to carry the new interest rate, redemption privileges and provisions for bids on portions of issues has resulted in this degree of participation by private investment. We are hopeful that this sale will set a precedent and that we can look forward to an even greater degree of private participation in future issues to be advertised."

A mental hospital study project being conducted by the American Psychiatric Association indicates that "a tremendous amount of new construction is needed" to adequately keep pace with great advances that have been made in psychiatric therapies.

Interlocking
steel-slat
construction
assures extra
protection and
longer life at
lower cost*

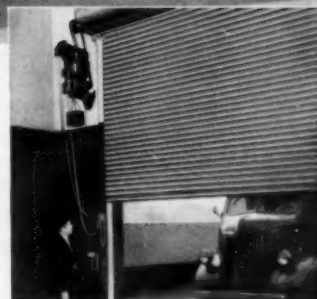
Kinnear Steel Rolling Doors

Smooth coiling
upward action
makes all
floor and wall
space fully
usable
at all times



With Kinnear Rolling Doors, all overhead space remains clear for hoist, crane or conveyor equipment or other superstructure. No floor or wall space is lost *inside or outside* of Kinnear Rolling Doors because they open straight upward. Light from overhead fixtures is never obstructed.

Kinnear Rolling Doors coil compactly, directly over the door lintel. Edges of the steel curtain are securely anchored in tracks from floor to lintel, insuring secure closure and extra protection against fire, intrusion and the elements. Kinnear's smooth upward action assures easy manual lift, chain or crank operation, and is ideal for time-saving electric control, using Kinnear Motor Operators with push-buttons at any number of convenient points. Kinnear Rolling Doors are built any size . . . easily installed in old or new buildings. Write today for full details.



DOUBLE PROTECTION AGAINST THE ELEMENTS

Kinnear Steel Rolling Doors are heavily galvanized (1.25 oz. of zinc per sq. foot, as per ASTM standards) to provide a long-lasting weather-resistant surface. In addition Kinnear Paint Band, a special phosphate application, provides for easy, thorough paint coverage and lasting paint adhesion.

Records show that many Kinnear Rolling Doors have been in continuous service for 20, 30 and 40 years.

KINNEAR
ROLLING DOORS
Saving Ways in Doorways

The KINNEAR Manufacturing Co.

FACTORIES:

650-680 Fields Avenue, Columbus 16, Ohio

1742 Yosemite Ave., San Francisco 24, Calif.

Offices and Agents in All Principal Cities

We are NOT earthmoving contractors

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

SYMBOLS

DL=Day Letter
NL=Night Letter
LT=Inc'l Letter Telegram
VLT=Int'l Victory Ltr.

ROScoe S. BERRY
Berry Brothers Machinery Company
378 So. Industrial Boulevard
Dallas, Texas

Your letter of February 4th, with newspaper clipping attached indicating R. G. LeTourneau, Inc., Longview, Texas, is apparent low bidder on Cottonbelt railroad relocation in Bowie County, Texas, greatly concerns us.

Apparently the similarity of corporate names is confusing to some contractors, and is most embarrassing to the LeTourneau-Westinghouse Company, which is wholly owned subsidiary of the Westinghouse Air Brake Company.

We wish to state emphatically there is no financial or other connection or interest between R. G. LeTourneau, Inc. and our company.

R. G. LeTourneau, Inc., sold to LeTourneau-Westinghouse Company its line of earthmoving equipment and Peoria and Toccoa plants, and expressly agreed not to directly or indirectly engage in the manufacture or sale of earthmoving equipment for a period of five years ending April 30, 1958.

Earthmoving, as defined in the contract, includes the moving or handling of earth, minerals, sand, rock, snow, ice, slag, and the like.

R. G. LeTourneau personally is not an owner, officer, or member of the management group of LeTourneau-Westinghouse Company. He was retained as an engineering consultant for the five year period, available upon our request, but he has not had any contact with our business for many months.

R. G. LeTourneau, Inc., is unquestionably free to engage in contracting activities, but not to manufacture or sell earthmoving equipment.

LeTourneau-Westinghouse Company has not, and does not intend to engage in earthmoving contracting, and deplores this practice.

We don't intend to build dams, airports, railroad grades, or highways. Our only interest is to build the most profitable line of earthmoving machinery for our customers.

LeTourneau-Westinghouse Company

JOHN W. SCHOEN
Vice President and General Sales Manager

To clear up a misunderstanding about the LeTourneau-Westinghouse Company, above telegram was sent to Berry Brothers Machinery Company, Dallas distributors for LeTourneau-Westinghouse Company.

LeTourneau-Westinghouse Company

PEORIA, ILLINOIS

A Subsidiary of Westinghouse Air Brake Company

1-645-G

» THERE IS a continuing need to stimulate entrance into the construction trades of eligible and competent young men to carry on expanding construction programs and to replace losses among workmen, Frederic G. Krapf, Wilmington, Del., Apprenticeship Committee chairman, reported to the convention in Los Angeles.

Mr. Krapf also cited the need for greater management participation in apprentice training and announced that an A.G.C. apprenticeship promotional booklet is under preparation.

At the group's meeting it was reported that last year Mr. Krapf and W. A. Snow, committee secretary, national A.G.C., prepared several articles demonstrating ways to interest young men in becoming construction apprentices. Though the articles were prepared independently, their similarity indicated general concurrence in methods proposed.

Promotional Plans Succeed

Some of the promotional plans were tried by Mr. Krapf and met with reasonable success. The committee voted to have the chief points of interest incorporated in one article and distributed to A.G.C. chapters and branches.

Mr. Snow then reviewed the progress on the A.G.C. apprenticeship booklet being prepared by the national office and submitted a rough draft for the committee to study. Members suggested the inclusion of a chapter on safety. The booklet is due for publication soon.

It was reported by Mr. Snow that a recent survey of building members of the Governing and Advisory Boards showed that over 20% of those reporting had begun their careers in construction as apprentices. As a result

Apprenticeship Resolution

The following resolution dealing with apprentice training was passed at the convention:

"Because of the continued need for efficient and skilled craftsmen in the construction industry, the 35th annual convention of The Associated General Contractors of America, held in Los Angeles, March 1-4, 1954, recommend the continued active participation by general contractors in apprentice training programs in cooperation with federal, state and local units of government and labor."

Expanding Construction Volume Requires More New Apprentices

- Need Cited for Greater Management Participation
- National A.G.C. to Publish Promotional Booklet



Frederic G. Krapf (left), Wilmington, Del., chairman of the A.G.C. Apprenticeship Committee, presents Curtis Bell, managing director of the South Texas Chapter, Corpus Christi, with a \$100 check in recognition of his outstanding work last year in carrying out an apprenticeship program in his area.

of this pilot study, the committee requested that the secretary poll all of the building contractors on the same question. If the results appear as favorable, it was suggested that they be used in the committee's present promotional program.

Archie Mooney, of the California division of apprenticeship standards, showed the meeting types of literature his office has developed on apprentice training. Mr. Mooney added that he is working to establish a higher ratio between journeymen and apprentices.

He concluded with praise for the Southern California Chapter, A.G.C., for its "cooperative spirit" in working with the State Apprenticeship Council. He also complimented R. A. Smith, a member of the chapter, who is the current chairman of the Council.

Secretary Snow reported that the revised edition of the National Standards for Carpentry Apprenticeship have been released and are now available at the national A.G.C. office or

the Bureau of Apprenticeship. The standards were developed jointly by the United Brotherhood of Carpenters and Joiners of America and the A.G.C.

Stress Safety Education

Some members of the committee called for the inclusion of safety education in all local apprenticeship programs. It was suggested that each apprentice be indoctrinated in safety, and if possible be given one of the small pocket-sized booklets of the association's Safety Manual relating to his particular trade.

The committee voted to discontinue following the convention, the \$100 Apprenticeship Activity Award which has been presented annually to the chapter secretary with the best apprenticeship program. This year's winner, who received the award at the general session of the convention, was Curtis Bell, managing director of the South Texas Chapter, Corpus Christi.



Contractor: Lundy Construction Company, Williamsport, Pa. Engineers: A. W. Lookup Company, Philadelphia, Pa. Architect: D. H. Grootenboer, Williamsport, Pa.

Economical Architectural Concrete made with Duraplastic* Rates an "A" in Appearance

THE NEW Theodore Roosevelt Junior High School in Williamsport, Pa., scores high in appearance as well as economics—construction costs are held down because architectural concrete serves as both structural and facing material. And lowest possible maintenance and insurance costs can be figured with durable, fire-safe concrete construction. For better concrete quality, Atlas Duraplastic air-entraining portland cement was used throughout.

Duraplastic aids proper placement with improved surface appearance because of its more workable, more plastic mix. It requires less mixing water for a given slump. And with Duraplastic, there's another big advantage—

The air-entraining feature, originated and developed by Universal Atlas, minimizes bleeding or water gain and segregation. Thus the finished concrete is fortified against the effects of freezing-thawing weather.

YET DURAPLASTIC COSTS NO MORE. These advantages are yours simply by *specifying* Atlas Duraplastic. It sells at the same price as regular cement and requires no unusual changes in procedure. Complies with ASTM and Federal Specifications. For more information, write Universal Atlas Cement Company (United States Steel Corporation Subsidiary), 100 Park Ave., New York 17, N. Y.

OFFICES: Albany, Birmingham, Boston, Chicago, Dayton, Kansas City, Minneapolis, New York, Philadelphia, Pittsburgh, St. Louis, Waco.

*"Duraplastic" is the registered trade mark of the air-entraining portland cement manufactured by Universal Atlas Cement Company.

ATLAS®

DURAPLASTIC

AIR-ENTRAINING PORTLAND CEMENT

Makes Better Concrete at No Extra Cost



C.D. 150R

UNITED STATES STEEL HOUR—Televised alternate weeks—See your newspaper for time and station.

» THE association is now in the sixth year of a coordinated and expanding program of making known to various segments of the public the work which the A.G.C., the chapters and the members do that is of benefit to the public.

It is the opinion of the Public Relations Committee, Chairman George C. Koss, Koss Construction Co., Des Moines, Iowa, reported to the 35th annual A.G.C. convention, "that a better job is being done in public relations each year, and that studies which have been authorized will make it possible for an increasingly better job to be done in the future."

Constructor Value Cited

He reported that the largest single activity of the public relations staff continues to be publication of *THE CONSTRUCTOR*, the content of which is directed toward carrying forward the association's entire program and to publishing information which is needed by members in the conduct of their business. Mr. Koss stated:

"The committee recommends once again to those chapters not already doing so that they take out subscriptions for architects, engineers, public officials and others in their communities with whom they maintain contact because the experience of many chapters has demonstrated that this can be the keystone of their public relations programs.

"We have reviewed the many other documents which are necessary for conduct of the association's business and we believe that they are of high quality and effective in carrying out the association's program.

"The association's small program of paid advertising has been continued. It is directed primarily to those who have influence in the award of construction contracts. We recommend that the program be continued, and that it be expanded as the association's budget permits.

"With the chapter managers present there was additional discussion of the ways by which the national association and the chapters can be mutually helpful in developing and expanding chapter public relations programs. We believe that a sound program has been started which can be increasingly more helpful to the chapters.

"The committee concluded its meeting by considering the results of a study which it had authorized of exploring the opportunities for the asso-

'Sound' Public Relations Program Continued

• Committee Studies Plans for Expanded Activities in Future

ciation to bring information about the industry to high school students, and through them to their parents. The committee is not yet prepared to present a positive recommendation to the association, but does believe that there is a great opportunity for the association to bring information about the industry to students, and through such a program to encourage greater numbers of qualified young men to come into the industry either through en-

gineering schools or through our apprenticeship or other training programs."

William E. Woodruff is manager of public relations, and William G. Dooly, Jr., is assistant manager. Other members of the public relations staff are Edward A. Greene and Osburn Zuber.

Mr. Koss and Mark K. Wilson, Jr., Chattanooga, Tenn., have been re-appointed chairman and vice chairman of the committee for 1954.

Kansas Builders Forum Idea Wins Award

• Industry Harmony Promoted, Public Served in Conferences

» THE Kansas Builders Forum has become an established medium for bringing about greater understanding and confidence among members of the industry in the state.

Its membership is composed of the individual members of the following organizations:

Kansas Chapter, Builders Division, The Associated General Contractors of America.

Kansas Chapter, American Institute

of Architects.

Kansas Master Plumbers Association.

Kansas Chapter, National Electrical Contractors Association.

The objectives of the forum are set forth in its bylaws:

"1. To provide an organization whereby the problems and interests of the construction industry as a whole may be discussed, analyzed and efforts made to create broader understanding



Kenneth R. Lewis, Manager and Executive Secretary of the Kansas Chapter, Builders Division, left, receives a \$100 check from Vice President George C. Koss for winning the Constructionizing Award. The annual award is made possible by a special fund established by Past President A. P. Greensfelder. The award was for Mr. Lewis' part in establishing and carrying out work of the Kansas Builders Forum which is improving relationships in the industry so that it better serves the public.

OUTLOOK BRIGHT, CONTRACTORS TOI
1000 Hear U.S. Steel
ains at Opening of

Contractors Told Year May Top '53
Leaders of the construction industry here have informed contractors in 1953, stressed the

There's Good News Today
U.S. Seen by Steel
bright future for the country's construction industry, President of the

Los Angeles Times
Civil Works to Get New
Impetus, Session Told

Public Relations
Nation's Economy Sound,
Contractors' Parley Told
Contractors' Convention
Banker and U.S. Official
of Present Pause and Fore

MacLeod Elects 1954 President of AGC
WASHINGTON—The Associated General Contractors of America

Mitchell Visions Banner Year for Construction
The construction industry is expected to have a banner year for construction in 1954, according to a report by the Associated General Contractors of America.

Herald Tribune
Pittsburgh Post-Gazette
One of America's Great Newspapers

Contractors' Poll Points Big Year, Parley Told
Seen Next to Best in History, With
Winning Competition as Major Factor

Program Published For AGC Convention
LOS ANGELES—Programs have been announced for the 35th annual convention of the Associated General Contractors of America, which opens here next week.

Plan Largest AGC Convention For Los Angeles
WASHINGTON—Plans for the largest convention in the history of the Associated General Contractors of America are being made in Los Angeles.

Contractors See Good Year, Also Increased Competition
Fifty-four expect a decline in heavy construction, it is expected that heavy construction will be hard hit in the Pacific Coast states.

Contractors Urge Road Aid Hike
Increased federal aid to states for highways and more adequate construction programs for airports were called for yesterday in resolutions passed by the Associated General Contractors of America.

Home Buyers Realize Bigger Value for
Stiffening competition in the construction market among Youngstown district available building jobs, public and private.

Contractor Urge Bill for Road
LOS ANGELES—A federal highway bill is being pushed by the Associated General Contractors of America.

Detroit Times
L.A. Man Heads Contractors
L. A. Banker Doubts Serious Recession

Building Record Set in '53
The construction industry has set a new record for the year 1953, according to a report by the Associated General Contractors of America.

Construction 15% Better, Builders Told
LOS ANGELES, March 3.—(Special)—John MacLeod, president of the Associated General Contractors of America, has been elected president of the 35th annual convention.

CLEVELAND NEWS
Gives Contractors Bright Picture
Labor Secy. Sees No 'Boom to Bust' Peril

Not to Balk Dip, Labor Secretary Tells Contractors
The labor secretary has urged contractors not to balk at a dip in the economy, as he sees no "boom to bust" peril.

Construction 15% Better, Builders Told
LOS ANGELES, March 3.—(Special)—John MacLeod, president of the Associated General Contractors of America, has been elected president of the 35th annual convention.

The Atlanta Journal
Capital Outlays Expected To Continue at High Level

Construction 15% Better, Builders Told
LOS ANGELES, March 3.—(Special)—John MacLeod, president of the Associated General Contractors of America, has been elected president of the 35th annual convention.

Los Angeles Times
Civil Works to Get New Impetus, Session Told

Chicago American
Nation's Contractors Meet in Los Angeles For Thirty-fifth Annual Business Session

Los Angeles Times
Civil Works to Get New Impetus, Session Told

Construction 15% Better, Builders Told
LOS ANGELES, March 3.—(Special)—John MacLeod, president of the Associated General Contractors of America, has been elected president of the 35th annual convention.

THE MILWAUKEE JOURNAL
OUTLOOK BRIGHT, CONTRACTORS TOLD

Los Angeles Times
Civil Works to Get New Impetus, Session Told

Construction 15% Better, Builders Told
LOS ANGELES, March 3.—(Special)—John MacLeod, president of the Associated General Contractors of America, has been elected president of the 35th annual convention.

Los Angeles Times
Civil Works to Get New Impetus, Session Told

Construction 15% Better, Builders Told
LOS ANGELES, March 3.—(Special)—John MacLeod, president of the Associated General Contractors of America, has been elected president of the 35th annual convention.

Los Angeles Times
Civil Works to Get New Impetus, Session Told

Los Angeles Times
Civil Works to Get New Impetus, Session Told

Construction 15% Better, Builders Told
LOS ANGELES, March 3.—(Special)—John MacLeod, president of the Associated General Contractors of America, has been elected president of the 35th annual convention.

Los Angeles Times
Civil Works to Get New Impetus, Session Told

Los Angeles Times
Civil Works to Get New Impetus, Session Told

Construction 15% Better, Builders Told
LOS ANGELES, March 3.—(Special)—John MacLeod, president of the Associated General Contractors of America, has been elected president of the 35th annual convention.

Los Angeles Times
Civil Works to Get New Impetus, Session Told

of the various phases entering into the harmonious consummation of building projects.

"2. To promote the general objectives of the various national organizations represented herein by the members of the state associations affiliated with such national bodies.

"3. To foster and develop fellowship, understanding and confidence within the individual memberships of this organization.

"4. To encourage ways, means and methods of improving conditions affecting the construction industry to the end that the public may be better served."

Organization Described

The germ of the forum idea came from a letter which Kenneth R. Lewis, manager and executive secretary of the Kansas Chapter, Building Division, A.G.C., wrote in August 1949 to Floyd Wolfenbarger, then president of the Kansas Chapter, A.I.A., suggesting that the two organizations form a joint committee to work out mutual problems.

The two groups held a meeting in February 1950 to organize such a committee. Instead it was agreed to invite the plumbing and electrical contractors to join and that efforts be

made to achieve greater harmony and cooperation within this entire segment of the industry.

The first Kansas Builders Forum was held September 29 and 30, 1950. Subsequent forums were held in September of each year following and the fifth forum is scheduled for September 23 and 25, 1954.

For his part in developing and carrying out the work of the Forum Mr. Lewis was awarded the Constructionizing Award at the A.G.C. 35th annual convention in Los Angeles in March.

The forums have been attended by an average of 200 members and their wives.

Results Enumerated

Results of the Forum have been both tangible and intangible. At each meeting resolutions have been adopted which have done much to:

Reduce the number of unit prices which contractors formerly were required to furnish with bids.

Reduce a confused situation concerning deposits and charges for plans.

Eliminate lettings scheduled for Mondays and days following holidays.

Clarify the problem of storage facilities on jobs, and many others.

In 1953 a Standard Check List for Specification Titles was adopted, and more work is being done to perfect it.

For the 1954 meeting a new idea will be tried of having small groups discuss suggested topics on the first day, and bring the recommendations to the full group on the second day for further discussion and action.

An Appraisal

After the fourth forum, Edward Weilepp, editor of the *Kansas Construction Magazine*, made an appraisal, and wrote in part:

"If it had done nothing more than 'to foster and develop fellowship, understanding and confidence,' it would have been declared a success. It has done much more, however.

"As each year goes by, as each Forum meeting is held, we hear less and less complaining and name calling among the various members of the industry. It has helped the entire industry in other ways, too, besides bringing the individuals involved face to face."

An important part of the Forum's work has been to inform the public, through publicity and other means, that the members of the industry are working for the public interest.

» NEWS coverage of the A.G.C. 35th annual convention in Los Angeles was considered well-balanced.

The day by day story of the convention was reported in the news columns of the Los Angeles and other west coast newspapers, and a substantial volume was carried throughout the country via the wire services, particularly the Associated Press.

An unusual amount of editorial comment appeared in many newspapers dealing with the importance of the industry as a cornerstone of the nation's economic structure and the significance of the messages brought to the meeting by guest speakers.

The trade press, particularly the magazines serving the construction industry, also extended good coverage.

Television, the newest medium of communication, demonstrated an awareness of the position of the association as spokesman for the industry by presenting interviews with C. P. Street, as national president, and James D. Marshall, executive director, on Columbia Broadcasting System and the American Broadcasting Co.

Press Gives Convention Balanced Coverage

• Editorial Comment Favorable; Much Wire, TV Publicity

Portions of the sound film of Secretary of Labor James P. Mitchell's talk were televised from the Los Angeles outlet of the National Broadcasting Co., and made available to the CBS and Movietone television networks at Washington, D. C.

Convention photographs were furnished to the fourth major network, DonLee-Mutual, which showed them as "stills" during several newscasts. As monitoring was not done, no report on radio coverage can be made.

The press coverage was favorable from a public relations standpoint. Substantial publicity was given to the annual report, the A.G.C.'s survey of industry conditions, several convention resolutions, safety awards, elections of officers and directors, and apprentice training, as well as the remarks of guest speakers.

Resolutions particularly singled out by the press were those calling for highway federal-aid returns to the

states of not less than \$900 million annually with no diversion of funds to other purposes, calling attention to the tremendous backlog of public works needs, and recommending sound advance planning of these projects.

Editorial and business writers commented favorably on various aspects of the A.G.C. program and the industry's contribution to the national welfare. The tenor of the press comment may be gathered from the titles of some of the editorials:

"On the Bright Side"; "For Highways"; "Good Advice from Two Experts"; "Prosperity's Ante"; "Things to Come in Building"; "Another Banner Construction Year"; "We Haven't Seen Anything Yet"; "The School Problem"; etc.

The *Denver Post* carried a three-column streamer, "There's Good News Today," in red ink over a page one story on U.S. Steel President Hood's optimistic prediction for the future.

Here's Why The **MICHIGAN** Tractor Shovel WILL DO MORE WORK FOR YOU!



* *This Power Train — from engine to tires — engineered and manufactured by Clark*

* **CLARK TORQUE CONVERTER** — 3-to-1 multiplication factor provides maximum torque *when it is needed*. Precise control in inching and digging.

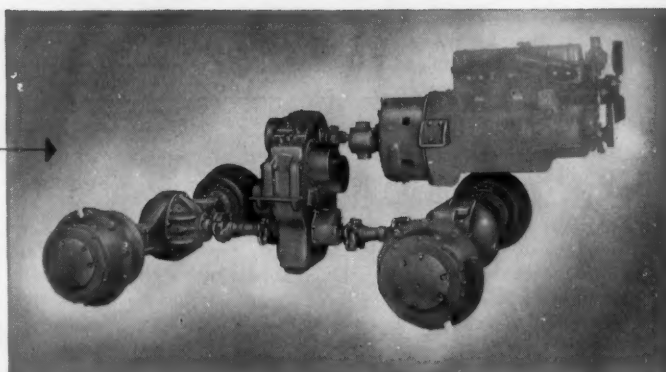
* **CLARK POWER-SHIFT TRANSMISSION** — no conventional clutch; four speeds forward and reverse—direction control by lever on the steering column.

* **CLARK PLANETARY DRIVE AXLE** — final reduction in the wheel reduces the torque load on all gears and shafts.

RESULT — easier operation, utmost accessibility and simplicity of servicing, highest efficiency in shovel handling.

ADD greater weight and more horsepower than any front-end loaders of comparable capacity, and you see why you can Move More with a MICHIGAN*.

*A Trademark of Clark Equipment Company



For full information send for the MICHIGAN Tractor Shovel Fact-Folio — specifications, action photos, magazine article. The coupon will bring your copy.

**CLARK
EQUIPMENT**



CLARK EQUIPMENT COMPANY, Construction Machinery Division
382 Second Street, Benton Harbor, Michigan, U. S. A.

Please send the MICHIGAN Tractor-Shovel Fact-Folio

Name _____ Title _____

Firm Name _____

Address _____

City _____ Zone _____ State _____

» **AVAILABILITY**, production level and price structure of equipment and parts during 1954; the construction industry market, and construction and construction equipment financing were among the subjects discussed at a meeting of the National Joint Co-operative Committee of the Construction Industry Manufacturers Association and The Associated General Contractors of America in Los Angeles held in conjunction with the 35th annual convention of A.G.C.

Stable Equipment Situation Seen in 1954

• C.I.M.A.-A.G.C. Group Sees Almost No Exception in Supply

It was the consensus of the manufacturers present that equipment and parts were available for all contractors' requirements with practically no exceptions. The manufacturers forecast a slightly lower level of equipment production for 1954. Prices would probably remain at the same general level, they said.

The date of the next convening of the C.I.M.A.-A.G.C. group was scheduled during the mid-year meeting of the A.G.C. Governing and Advisory Boards in St. Louis, Sept. 27-29, 1954.

Co-chairmen for the meeting were W. B. Greene for C.I.M.A. and A.G.C. past-president D. W. Winkelman for A.G.C.



C.I.M.A.-A.G.C. National Joint Committee—Seated clockwise: C. E. Cooke, Cooke Contracting Co., Detroit, Mich.; George C. Koss, Koss Construction Co., Des Moines, Iowa, A.G.C. vice president-elect; Julien R. Steelman, Koehring Co., Milwaukee, Wis.; Albert D. Blakeslee, C. W. Blakeslee & Sons, Inc., New Haven, Conn.; Arthur S. Horner, A. S. Horner Construction Co., Denver, Col., A.G.C. past president; D. W. Winkelman, D. W. Winkelman Co., Syracuse, N. Y., A.G.C. past president and committee co-chairman; W. B. Greene, Barber-Greene Co., Aurora, Ill., co-chairman of the committee for C.I.M.A.; Harold F. Hess, executive vice president, C.I.M.A., Chicago, committee co-secretary; Frederick Salditt, Harnischfeger Corp., Milwaukee, president of C.I.M.A.; H. W. Richardson, editor, Construction Methods and Equipment magazine, New York; Howard Dixon, Johnson, Drake & Piper, New York; R. N. Raulston, R. & G. Construction Co., New Castle, Del.; and C. R. Ralph, Kaw Paving Co., Topeka, Kan.

Standing left to right: C. S. Embrey, assistant executive director of A.G.C., Washington, committee co-secretary; James B. Kenney, James B. Kenney, Inc., Denver; J. L. Ferry, Peter L. Ferry & Son, Glendale, Calif.; W. F. Maxwell, general contractor, Los Angeles; H. T. Reishus, International Harvester, Chicago; J. T. Callaway, The Goodyear Tire & Rubber Co., Chicago, C.I.M.A. director, and M. W. Watson, general contractor, Topeka, A.G.C. past president.

» **PROGRESS** in the establishment of local joint committees of the Associated Equipment Distributors and The Associated General Contractors of America was reported at a meeting of the national joint committee held in Los Angeles in conjunction with the A.G.C.'s 35th annual convention.

The following local committees have been organized, it was reported: Central California Chapter, A.G.C. of Delaware, Montana Contractors Association, Nevada Chapter, New York State Chapter, and Houston Chapter.

The A.E.D.-A.G.C. group was assured of continued cooperation of the

A.E.D.-A.G.C. Drive for Local Units Gaining

• National Committee Considers Mutual Problems at L.A.

parent organizations in the organization of such local groups by G. W. Gagel, A.E.D. president, and C. I. Mehl, of the A.G.C. national staff, acting co-secretary of the national joint committee.

The possibilities of establishing a "Blue Book" for the construction machinery industry which would serve as a guide to standard values of used equipment, were discussed. Other sub-

jects covered included equipment financing problems and the advisability of a clearing house for titles to new and used equipment.

Presiding as co-chairmen were M. J. Lyons for A.E.D. and C. E. Cooke for A.G.C. Frank Skidmore was co-secretary for A.E.D. The next meeting of the joint committee was set down for the fall, the exact date and place to be decided at a later date.



A.E.D.-A.G.C. National Joint Committee shown at its meeting in Los Angeles held in conjunction with the 35th annual convention of A.G.C. Seated clockwise are: P. A. Dufford, Intermountain Equipment Co., Boise, Idaho; H. J. Hush, Griffin Equipment Corporation, New York, N. Y.; S. F. Laskey, Northwestern Equipment, Inc., Fargo, N. D.; Frank Skidmore, Contractors' Equipment & Supply Co., Albuquerque, N. M., committee co-secretary for A.E.D.; M. J. Lyons, Lyons Machinery Co., Little Rock, Ark., committee co-chairman for A.E.D.; C. E. Cooke, Cooke Contracting Co., Detroit, Mich., committee co-chairman for A.G.C.; C. I. Mehl, A.G.C. national staff, Washington, acting committee co-secretary; E. G. Hoepfner, Hoepfner-Bartlett Co., Eau Claire, Wis.; C. W. Gagel, Machinery and Supplies Co., Kansas City, Mo., A.E.D. president, and M. Clare Miller, San Ore Construction Co., McPherson, Kan.

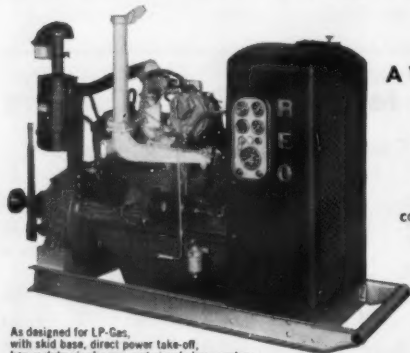
Standing left to right are: R. A. Smith, P. J. Walker Co., Los Angeles, Calif.; J. R. Randle, field representative for A.E.D., Chicago; Don Buzzell, A.G.C. national staff, Washington; I. R. Kraemer, Buran Equipment Co., Oakland, Calif.; George C. Koss, Koss Construction Co., Des Moines, Iowa, and Beal Shaw, Shaw Sales and Service Co., Los Angeles.

REO INDUSTRIAL POWER

is Performance-Inspected

Each new Reo Industrial Engine is carefully inspected on-the-job just before it goes into service, and—again—after a month of operation. Whether purchased as an individual unit or in an assembled machine, we make doubly sure all users get the fine performance Reos are built to deliver.

World-famous Reo spark-ignition engine design has been skillfully adapted for every need from 50 to 180 continuous horsepower. Gasoline. Natural gas. Liquefied petroleum gas. Dual-fuel combinations. For heavy-duty features and low operating costs, depend on Reo reliability. Write for specification and name of nearest dealer.



As designed for L.P.-Gas, with skid base, direct power take-off, heavy-duty air cleaner, and visual alarm system with automatic shutdown.

A VERSATILE, RUGGED "PACKAGE"

Efficient combustion from Reo overhead valves . . . seven main bearings for long-lasting smooth operation, with interchangeable inserts for simple low-cost repair . . . integral oil cooler; full-flow oil filter; large-capacity oil pump; positive crankcase ventilation; fully controlled by-pass cooling system. Reo wet sleeve design allows rebuilding to "as manufactured" tolerances and clearances, and permits cleaning of water jacket to maintain desired rates of heat transfer from valves, pistons, and rings. Basic units and supplementary equipment for every application.



INDUSTRIAL ENGINE DIVISION **REO MOTORS, INC.** LANSING 20, MICHIGAN

SLOANE QUANTITY SURVEYS

FOR ALL CLASSES
OF CONSTRUCTION

- Large staff of engineers
- Speed, accuracy, full detail assured
- Reasonable fees, pre-fixed

Approved by A.G.C.
and Governmental Authorities

You can depend on surveys by

H. A. SLOANE ASSOCIATES

Established 1922

415 LEXINGTON AVE., NEW YORK 17



Half a Store Front is not enough

When you as a Builder-Contractor let sub-contracts for new or remodeled store front construction, why endanger your profits and your reputation with inferior products or workmanship that add up to only "half" a store front?

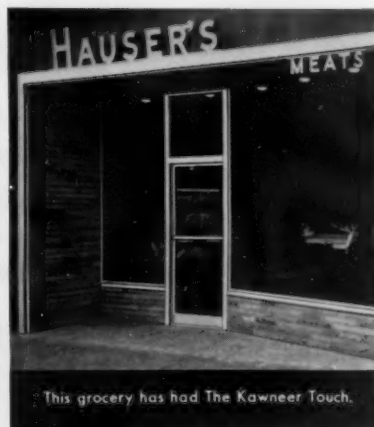
The Kawneer Company, leading designer and producer of store front materials, doors and entrances, aluminumized or colored porcelain enamel Zourite facing or identification background material, and sensational new sun-control products will help you please your clients. And your profits will be sure, your job schedule full, with outstanding store fronts that have had the product and installation benefits of *The Kawneer Touch*.

A factory-trained Kawneer Installing Dealer can give your store front jobs *The Kawneer Touch* by installing superior Kawneer products with the craftsmanship and attention to detail that characterizes a Kawneer job.

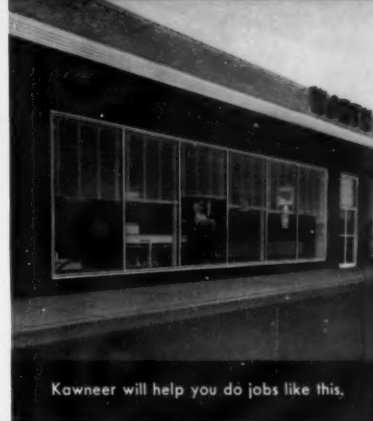
Learn what benefits *The Kawneer Touch* has for you in the new "Kawneer-Contractor Plan." A Kawneer Dealer will discuss the "Kawneer-Contractor" plan in detail. He's listed under "Store Fronts" in the classified pages of your telephone directory. Call him today, or write Kawneer, Niles, Michigan.



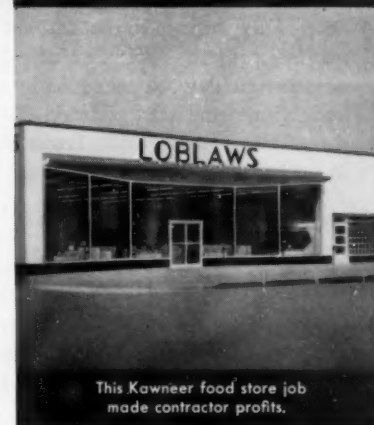
Look for the Kawneer pages in Sweet's Light and Heavy Construction Catalogs.



This grocery has had The Kawneer Touch.



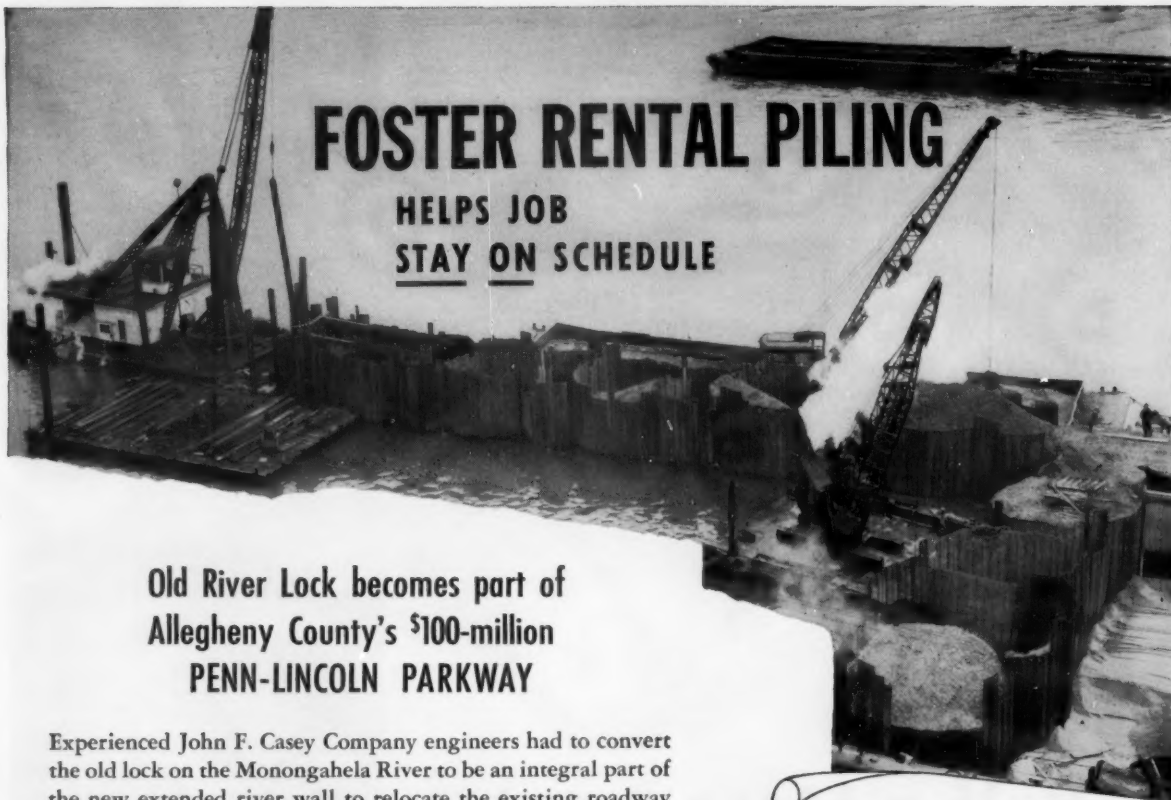
Kawneer will help you do jobs like this.



This Kawneer food store job made contractor profits.



Typical Kawneer grocery modernization.



FOSTER RENTAL PILING

**HELPS JOB
STAY ON SCHEDULE**

Old River Lock becomes part of Allegheny County's \$100-million PENN-LINCOLN PARKWAY

Experienced John F. Casey Company engineers had to convert the old lock on the Monongahela River to be an integral part of the new extended river wall to relocate the existing roadway and accommodate the new Penn-Lincoln Parkway. Casey engineers drove cellular cofferdams averaging 23'9" in diameter to keep water seepage to the minimum on this tremendous engineering project. Their careful planning insured an efficient, uninterrupted work schedule in constructing the river wall, and an important part of the schedule depended on Rental steel-sheet Piling from Foster. Foster delivered ahead of schedule, in the exact sections (MP-112) and in the specified lengths.



On your next Piling job, call Foster for the exact sections, in the exact lengths... on the job when you need it, and at Foster's standard low rental rates that allow considerable saving.

NEW PILING CATALOG
Just Released!

Describes steel-sheet Piling Sections and construction data. Ask your nearest Foster office for Catalog CP-4.

L.B. FOSTER co.

PITTSBURGH • NEW YORK • CHICAGO • HOUSTON • LOS ANGELES

JOHN F. CASEY COMPANY

CONTRACTORS

Pittsburgh 30, Pa.

L. B. FOSTER COMPANY
P. O. Box 1647
Pittsburgh 30, Pa.

Gentlemen:

On many of our construction jobs, we have always found we can depend on L. B. Foster to supply our piling requirements promptly, and to our exact specifications. We know that having the right sections and proper lengths of steel-sheet piling, when they were needed, contributed greatly to the successful completion of our contract on the Penn-Lincoln Parkway job.

JOHN F. CASEY CO.

H. G. Cranston

H. G. Cranston
Director of Material

Call on Foster for All Your Needs—
RAILS • SWITCH MATERIAL
TRACK ACCESSORIES, TOOLS
PIPE AND FABRICATION
WIRE ROPE AND SLINGS

YOU SAVE WHEN YOU RENT STEEL-SHEET PILING FROM FOSTER

» SAFETY ACTIVITIES in the past year, which have been increased on the chapter and national levels, and by closer cooperation with allied groups, have furthered A.G.C. leadership in this important promotion function of management, H. B. Alexander, chairman of the Accident Prevention Committee, reported to the association's 35th convention in Los Angeles.

Coming Year's Program

The program for the coming year will include direct assistance by the national office to contractors and chapters in carrying out their safety program, and will see closer cooperation with the National Safety Council, the President's Occupational Safety Conference and other groups dedicated to safety.

As for past A.G.C. safety activities, Mr. Alexander said that since 1943 the number of members reporting safety programs has increased five fold, and that most contractors get back in the form of reduced accident costs \$5 to \$10 for every dollar invested in accident prevention.

"Our program is going ahead in a big way, and the outlook for future expansion is very bright," he said.

Adds to Prestige

"All of this adds to the prestige of A.G.C. nationally and locally, and the credit goes to those of our members . . . who have realized the opportunity to save lives and the possibilities of higher profits by means of controlling losses that otherwise would have been the price of accidents," he added.

Last year, as in the past, the na-

A.G.C. Manual in Japanese

The A.G.C.'s accident prevention manual is going to be translated into Japanese.

Shortly before the Los Angeles convention, the American Standards Association requested and received authorization from the national A.G.C. to permit the Japanese Standards Association in Tokyo to make a Japanese translation of A.S.A. A10.1-1951, the A.G.C.'s *Manual of Accident Prevention in Construction*.

The Japanese association, in making the request, said, "We believe this standard (the manual) will prove of great value for the Japanese industries."

Safety Activities on Increase, Committee Reports to Convention

- 1954 to See Closer Cooperation with Other Groups
- Future "Bright," Alexander Tells General Session



H. B. Alexander, center, chairman of the A.G.C. Accident Prevention Committee, presented first-place safety activity awards to the following chapter presidents at the convention: left to right, Edward Frisinger, Ann Arbor, Michigan Road Builders; D. H. Cowdin, Dallas, Dallas Chapter; H. H. Sturdy, Pittsburgh, second right, Construction Association of Western Pennsylvania; and George H. Field, Milwaukee, Milwaukee Chapter. The Michigan Road Builders led the group of chapters with over 100 members; the Construction Association of Western Pennsylvania led in the group of chapters with 50 to 100 members; and the Dallas and Milwaukee Chapters tied for first place in the group with less than 50 members.

tional office surveyed chapters to determine how many had conducted safety programs, Mr. Alexander said. The information was published prior to the convention in booklet form carrying under key numbers the records of over a thousand A.G.C. members, and their relative standings.

Included in this book are some 362 firms and chapters that won plaques, merit awards and certificates for outstanding records last year. In comparing last year's figures with the 1952 rate of activity, when only 201 such awards were presented, A.G.C. officials are assured that the safety program is saving lives and reducing construction costs, he continued.

In fact, he went on, A.G.C. firms last year compiled a better safety record than did general contractors who were surveyed by the Bureau of Labor Statistics in 1952.

He said that much progress has been made in getting more chapters to

organize safety programs. It is to the advantage of many small contractors who are unable to develop their own safety programs.

Safety Council Material

So as to help chapters increase their roles in safety activities, the national A.G.C. has recently completed negotiations with the N.S.C. calling for special service and materials to be supplied by the council to all chapters conducting formal safety programs. The service will be paid for by the national office.

"The service will consist of appropriate materials published by the N.S.C. and selected by the Promotion Projects Committee of the A.G.C.'s Committee on Accident Prevention. The material will be made up in packets, which will be mailed twice monthly to the eligible chapters. January and February mailings were completed by the time of the convention,"

ACCIDENT PREVENTION



A. L. Jackson, second left, front row, Chicago, a member of the Accident Prevention Committee, presented first-place safety awards to A.G.C. Building Division firms at the Los Angeles convention. Recipients with Mr. Jackson in the front row are as follows, left to right: H. B. Alexander, H. B. Alexander and Son, Inc., Harrisburg, Pa., best 10-year record; C. P. Cullen, second right, Blaw-Knox Co., Pittsburgh, best record last year among firms with over 500,000 exposure hours; and William J. Schirmer, Schirmer-Peterson Co., Cleveland, first among those in 1953 with under 200,000 exposure hours. Back row: C. R. Slimmon, Bryant and Detwiler, Detroit, best five-year record for firms with over two million hours; E. B. Hickok, representing John H. Sellen Construction Co., Seattle, best 1953 record of firms between 200,000-500,000 hours; and J. B. Warrack, J. B. Warrack Co., Seattle, best five-year record for firms with less than two million man-hours.



Shown above are some of the Heavy Division winners of first-place awards presented at the convention. Left to right: Richard B. Arbogast, Newbery Electric Corp., Los Angeles, best 10-year record; Robert M. Hoover, Accident Prevention Committee member who presented the awards; George Heller, A. T. Evans, and Forrest W. Parrot, of the Garrison Spillway Constructors, Riverdale, N. Dak., best 1953 record for firms with over 500,000 hours.

the A.G.C. safety chairman announced.

Other activities have seen the national staff and chapter offices participate in the various state and regional safety conferences. In May, the first meeting of the President's Occupational Safety Conference is planned and the association will be represented on several committees, he said.

Conclusions

In concluding, Mr. Alexander said "last year showed that our members are better informed and more active in accident prevention on their jobs than heretofore. Our chapters, with few exceptions, are inaugurating organized programs to assist their members in eliminating unsafe practices that make for losses and reduce profits.

"Our national office is in a better position than ever before to lend assistance. We have promoted team work nationally and locally. We are prepared to demonstrate that the various elements of the construction industry working together can do a good job on accident prevention and outside interference will be neither necessary nor helpful."

Also at the convention 12 first-place awards were presented winners with the best safety records as reported in last year's survey. Six other first-place awards along with all the second and third-place awards and all of the no lost-time certificates will be presented at local ceremonies conducted by the chapters.

Harry J. Kirk, national A.G.C. safety director, predicted following the convention that last year's record of 1,000 cooperating members will be topped by 25% in 1954.

Texas Branch Safety Clinic

The Texas Highway Branch (A.G.C.) held its third annual accident prevention clinic in Austin Feb. 16 and studied field problems in highway and heavy construction.

Also included in the day-long program held in the Stephen F. Austin Hotel, were workmen's compensation and public liability insurance costs.

James W. Williams, in discussing an effective safety program, said that top management must first take an active interest in preventing accidents and should place the responsibility of the program in a specific employee.

The top man in any organization sets the pattern, and whatever he hammers on is watched, he said.

600 Attend Mass. Program

Over 600 persons attended the first annual Massachusetts construction industry supervisors' safety training program held in Boston, Feb. 1, 8, and 15.

The three sessions, directed to the interest of superintendents and foremen, were designed to help reduce accidents and to give a basic understanding of the various types of safety programs.

Session one was devoted to insurance and workmen's compensation; session two covered the analysis of accidents; and the third session dealt with prevention of accidents.

A panel discussion, featured in the second session, was moderated by Julius Abrams, president of the A.G.C. of Massachusetts. Panel members included representatives of the carpenters, state department of labor, insurance companies and general contractors.

Guest speakers at the other sessions included John A. Volpe, state commissioner of public works; Eugene Giroux, chairman of the state accident board; and Robert L. Jenkins, chief of the Corps of Engineers' safety division, Washington, D. C.

The safety program was sponsored jointly by the A.G.C. chapter; the Building and Construction Trades Council, A.F.L.; insurance companies; the state department of public works.

General chairman was E. N. Ziner, safety engineer, John A. Volpe Construction Co., A.G.C., Malden, Mass.

N. C. Liability Rates Reduced

The Carolinas Branch (A.G.C.) and the National Bureau of Casualty Underwriters working together have recently effected a substantial reduction in North Carolina's liability rates for various categories of construction and industrial workers.

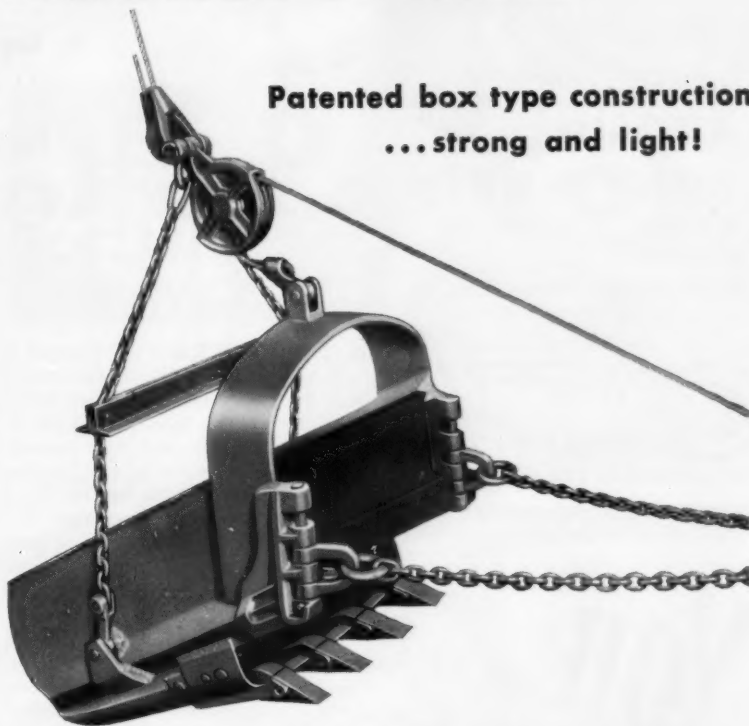
In announcing the revised rates, Charles F. Gold, state insurance commissioner, said that the average reduction would be 23%. He added that policy holders would save about \$100,000 annually if the mutual and independent companies effect similar changes, as they are expected to do.

The following construction job categories are affected by the new rates: carpentry, masonry and concrete construction, road paving, plumbing, excavation, and gas, steam and water mains and sewer construction.

Make more profits with

WELLMAN-WILLIAMS DRAGLINE BUCKETS

**Patented box type construction
...strong and light!**



THE Wellman-Williams Dragline Bucket is perfectly balanced, light in weight, has a wide digging radius and hitch connections for fast adjustment of digging depths. Alloy steels provide maximum strength with minimum dead weight. Teeth are made of manganese steel and are reversible. Perforated type dragline buckets also available.

It's a WELLMAN—built to dig and last while digging.

THE WELLMAN ENGINEERING CO.

CLEVELAND 4, OHIO

*Mail
coupon
for free
bulletin*

The Wellman Engineering Company
7074 Central Avenue, Cleveland 4, Ohio

Please send me a free copy of bulletin on:

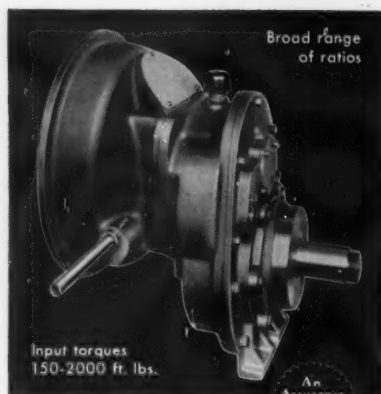
- | | |
|--|--------------------------------------|
| <input type="checkbox"/> Clamshell Buckets | <input type="checkbox"/> Stone Grabs |
| <input type="checkbox"/> Dragline Buckets | <input type="checkbox"/> Log Grabs |

Your Name _____

Address _____

City _____ State _____

Position _____ Company _____



Broad range
of ratios

Input torques
150-2000 ft. lbs.

An
Assurance
Dependable
Service

Special heavy-duty

- Transmissions
- Reduction Units
- Mechanical Drives for Torque Converters

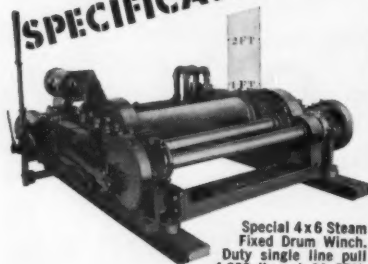
Cotta Transmission Co., Rockford, Illinois

COTTA

HEAVY-DUTY
TRANSMISSIONS

"Engineered-to-order"

You SET THE SPECIFICATIONS...



Special 4x6 Steam
Fixed Drum Winch.
Duty single line pull
4,300 lbs. at 90 FPM.

Superior-Lidgerwood-Mundy has the facilities and experience to meet them . . . either from an all-inclusive line of standard hoisting equipment or with equipment engineered to your specific requirements.

WRITE FOR BULLETINS AND CATALOGS

SUPERIOR LIDGERWOOD MUNDY CORPORATION

Main Office and Works: SUPERIOR, WISCONSIN, U. S. A.
New York Office, 7 Day Street, New York 7, N. Y.

ACCIDENT PREVENTION

Enforcing Safety Practices On Road Construction Work

- Contractors Must Protect Both Workers and Public

By Ray H. Hahn

Allegheny Asphalt & Paving Co., Inc., Pittsburgh

(EDITOR'S NOTE: This article is based on an address to the Construction Section of the 41st Safety Congress in Chicago, Oct. 20, 1953 by Mr. Hahn. It is the fourth of a series of five papers presented by speakers who stressed the engineering, education and enforcement problems of safety.)

» THE CONTRACTOR engaged in building public roads is confronted with various safety problems which differ from other construction work. Not only is he plagued with hazards that involve his workers, but he must protect the safety of the motorist using the roadway under construction.

There is first the problem of protecting workers from injury and the work from damage. Practically all highway work is exposed to the public and to the moving equipment that is found on all road construction. Enforcement of safety among the employees becomes a direct responsibility of the foreman or supervisor in charge of the job.

Supervisors Enforce Rules

It is necessary for management to set up a program which is workable on the various types of jobs performed in the constructing or repairing of highways. Goggles, safety shoes and other recognized safety equipment should be used as a matter of course. The supervisor, in placing men and equipment, must see to it that his workers comply with the safety rules on the job.

For example, in constructing or repairing highways the work may create a congested area unless supervisors see to it that one operation is completed in a given area before another one is started. If this is not done the workers may be placed in a hazardous area by the large amount of fast-moving equipment.

The methods and type of work performed by various pieces of equipment also become an enforcement problem. It is not uncommon for workers to damage equipment using it

on jobs for which it was not designed. Supervisors who enforce the proper use of equipment will expedite work and reduce the lost time due to accidents.

Use of Warning Signs

This is often hard to do because some jobs are of a short duration and the inexperienced help which is often employed results in a safety education program that is ineffective. Thus, proper equipment usage becomes an enforcement rather than an educational problem.

Barricades and warning signs should be placed properly to protect workmen from being injured by moving equipment. Enforcement of these methods often protects men engaged in extending pipe, building headwalls and other work which puts them below the level of the roadway on which the equipment is working.

At the Allegheny Asphalt and Paving Co. such an enforcement policy is mandatory. Not only do the warning signs and barricades protect our employees, but these devices protect our partially-completed jobs. Also, the equipment is kept working and not in the repair shop because of damages due to accidents on the job.

Protection of Motorists

The second portion of the safety problem facing contractors is the protection of the driving public.

This is even harder since we must enforce certain speed limitations, detours and unpleasant conditions which exist during the construction of highways to handle the increasing volume of fast-moving traffic. Signs announcing roads under construction must be large enough and legible enough to be read by motorists. The contractor must also make the driver abide by the regulations for his own protection.

In most cases a flagman is placed at both ends of a road job to slow down the motorists so that they can travel over uneven pavement or short detours

without injuring any persons or damaging any property or equipment.

General contractors doing this type of work need assistance from local and state authorities in enforcing detour and reduced-speed regulations. In some instances this cooperation is easy to obtain, but more often the contractor is left to shift for himself in controlling the flow of traffic.

Local Police Used

In our particular company we have found it practical to employ local police officers in uniform on their time off as watchmen and flagmen to enforce these regulations. Having an officer in uniform is more effective than having a workman trying to direct traffic.

There is a definite need for patrolling road construction with police officers because the public fails to realize that these roadways are not sufficiently wide enough, nor is visibility good enough to permit the speeds to which most motorists are accustomed on the straight arterial highways.

Our firm also believes that enforcement is a part of a safety program and that by penalizing those who don't accept it as part of their work, we can impress upon them the fact that safety is a must and that its acceptance is mandatory.

Legislation Opposed

If the individual contractor does not take the initiative in establishing his own safety program which will protect both the traveling public and his workers, then he will find that additional legislation by the states and federal government will compel him to do so. This will place the formulation and enforcement of safety measures in the hands of government, where it does not belong. Needless to say, this legislation should not be enacted.

In summing up enforcement of highway construction safety we find: that our own forces must be policed; that we have new employees which can cause accidents because of a lack of experience; that we have moving equipment posing a constant threat; and finally, that we have the motorist who is a constant danger to our work, men and equipment and particularly to his own personal safety.

All of these factors add up to the need for a stringent voluntary enforcement program on the part of the general contractor if he is to carry out his highway construction successfully.

Voids lighten the load!



FIBRE TUBES

for
voids
in
concrete
construction

Eliminate the dead weight of concrete without impairing structural strength.

Aircraft Hanger.
Contractor: Virginia
Engineering Co.

Low cost SONOVOID Fibre Tubes form voids which reduce the weight of the slab by displacing the low working concrete at the neutral axis . . . saves concrete and reinforcing steel.

Specifically developed for concrete bridge deck, wall, floor and roof slabs, SONOVOID also permits the prefabrication of prestressed and poststressed units.

Supplied in specified lengths or sawed to your requirements on the job. Sizes: 2" to 36.9" O. D. up to 24' long. Longer on special order.

For complete technical data and prices, write

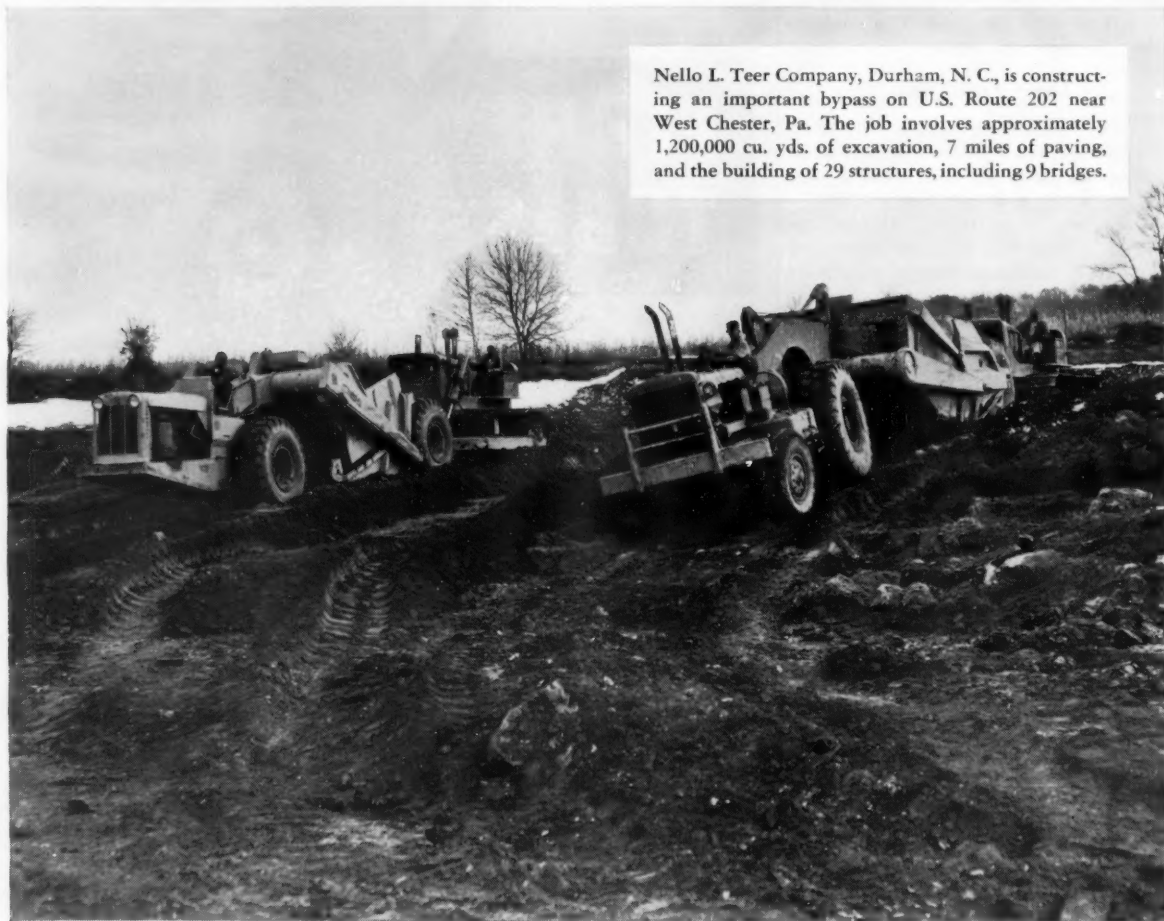
SONOCO PRODUCTS COMPANY

Construction Products Division
LOS ANGELES, CAL. 9003 SOUTH WESTERN AVE. HARTSVILLE, S. C. — MAIN PLANT. MONTCLAIR, N. J. 14 SOUTH PARK STREET
GARWOOD, N. J. BRANTFORD, ONT. AKRON, IND.



GULF PRODUCTS *and* **FINE SERVICE**

*keep equipment rolling
on Pennsylvania Highway Project*



Nello L. Teer Company, Durham, N. C., is constructing an important bypass on U.S. Route 202 near West Chester, Pa. The job involves approximately 1,200,000 cu. yds. of excavation, 7 miles of paving, and the building of 29 structures, including 9 bridges.

ANOTHER important construction job where equipment is making an outstanding record of dependable performance with the help of Gulf Quality Products and Fine Service.

Here is why Gulf is the preferred supplier of petroleum products to so many leading contractors, like Nello L. Teer Company, for example: Gulf Lubricants provide an extra margin of protection—whether it is hot or cold, wet or dry. And Gulf Fuels help insure full power.

When Gulf Quality Products are combined with expert engineering counsel and prompt delivery service, you have a Gulf package that is bound to smooth the way to greater yardage, better

equipment performance, and lower repair costs.

Gulf Quality Lubricants and Fuels—and that Good Gulf Service—are quickly available to you through more than 1400 warehouses in 31 states from Maine to New Mexico.



» **THE SECRETARIES' and Managers' Council**, with a majority of chapter executives in attendance, met prior to the convention in Los Angeles to discuss problems of chapter operations.

Following addresses by ranking A.G.C. officers and national staff members, the secretaries and managers discussed the latest developments in pending legislation, labor relations, state laws affecting contractors, accident prevention, public relations and plans for the next A.G.C. Executives' Conference.

Street, MacLeod Speak

Opening the meeting were short talks by A.G.C. President C. P. Street, of Charlotte; Vice President John MacLeod, of Paramount, Calif.; Managing Director H. E. Foreman and Executive Director J. D. Marshall, all of whom outlined phases of the association's progress in the last year.

Frank W. Robertson, chairman of the A.G.C. Legislative Committee, told of the pending dangers to general contractors if the subcontractors' bills (S. 848 and H.R. 1825) ever become law. He asked the chapter executives for "unrelenting cooperation" toward the defeat of these measures. If passed, the bills would require general contractors to name subcontractors and their offers in bids on all federal public works contracts.

Labor Relations

William E. Dunn, manager, labor relations, told the meeting of the latest developments in the labor field, with emphasis on proposed changes in the Taft-Hartley Law, and the "improved atmosphere" in the Davis-Bacon Section of the Labor Department brought about by the new Administration.

Mr. Dunn also asserted that it is important for the A.G.C. chapters and branches to retain their prominent places in labor relations.

Edward T. Kelly, labor service ad-

Secretaries and Managers Meet, View Current Chapter Problems

• AGC Officers Outline Association's Progress in 1953

visor, discussed in detail many jurisdictional dispute problems and other labor matters of interest to general contractors. Following this both Mr. Dunn and Mr. Kelly answered questions from the floor.

The chapter officials then heard complaints that some out-of-state contractors are avoiding many state taxes that resident contractors must pay in their own states.

The meeting took no action on the duplicate membership question pending further study.

After hearing reports of the liaison committees on public relations and accident prevention the meeting discussed the time and place of the next A.G.C. Executives' Conference. Though nothing definite was decided, most secretaries and managers seemed to favor Chicago's Drake Hotel in June, the site of last year's initial conference.

New Officers

New officers unanimously elected for 1954 terms in the council are A. H. Harding, Portland (Oreg.) Chapter, chairman; W. C. Bowden, Master Builders Association of Allegheny

County, Pittsburgh, vice chairman for building chapters; W. D. Shaw, Southern California Chapter, Los Angeles, vice chairman for highway and heavy chapters; and Curtis Bell, South Texas Chapter, Corpus Christi, secretary. Mr. Harding succeeded Robert Patten, of the Carolinas Branch.

Following the general meeting the building chapters, and highway and heavy chapters met separately.

Vice Chairman Bowden presided at the building chapters' meeting which heard W. A. Snow, manager of the Building Contractors Division, national staff, report on the latest developments in apprentice training. Mr. Snow called for more chapter participation in this program.

At the highway-heavy chapters' meeting presided over by Chairman Harding, Arch N. Carter, manager of the Highway Contractors Division, national staff, told the managers of the increased funds available for highways this year, the increased cooperation of A.G.C. and state and county highway officials, and the trend of more highway maintenance by contract. He also reported some of the new policies by the Bureau of Public Roads.



New officers of the Secretaries' and Managers' Council were installed at the Los Angeles convention. A. H. Harding, Portland, Oreg., center, receives the gavel as new chairman from Robert Patten, Charlotte, outgoing chairman. Other council officers looking on are Curtis Bell, Corpus Christi, re-elected secretary; William C. Bowden, second from right, re-elected vice chairman of the Building Division chapters; and W. D. Shaw, right, elected vice chairman of the Highway and Heavy Division chapters.

A.G.C. Presidents' Breakfasts

The convention breakfasts for A.G.C. presidents and vice presidents were well attended again this year. Over 100 of the chapter officers attended the breakfast sessions held in the Hotel Statler. The meetings gave these officials a chance to exchange views on industry conditions.

It's Colonel—Kentucky Kun'l Street, Suh

- Commissioned on Governor's Staff at A.G.C. Chapter Meeting



Colonel Street (right) receives his commission from A. E. Walker.

San Diego Chapter Elects New Officers

» SAN DIEGO Chapter of the A.G.C. held its annual meeting Jan. 14 in the El Cortez Hotel and elected new officers for 1954.

William C. Chambers, Chambers Steel Co., was elected president succeeding Robert M. Golden, M. H. Golden Construction Co. Earl E. Harris, Sim J. Harris Co., was installed as vice president. Continuing as chapter manager is M. A. Mathias.

New directors include Mr. Golden,

Mr. Chambers, Mr. Harris, S. F. Nielsen, R. A. Preston and A. S. Johnson, an affiliate member.

Outgoing President Golden made a year-end report of the construction industry in San Diego, expressing optimism for a large volume of new construction to be put in place.

Members voted to change their meeting schedule from monthly to bi-monthly, with special meetings to be held when necessary.



San Diego Chapter officers shown at the group's annual meeting are left to right: seated—Outgoing President Golden, President Chambers, and Mr. Harris, a director; standing—Mr. Mathias, chapter manager, Mr. Nielsen and Mr. Preston, directors.

» IT'S OFFICIAL now—C. P. Street is a Kentucky Colonel.

Mr. Street, 1953 A.G.C. president, who has long been known to his friends unofficially as a Blue Grass Colonel, was recently commissioned a Kentucky Colonel on the staff of Governor Lawrence W. Wetherby.

The "swearing-in" ceremonies took place at the annual convention of the Kentucky Highway Division (A.G.C.) in Louisville, Feb. 13. Officiating at the affair was A. E. Walker, president of the A.G.C. chapter, who acted on the behalf of the governor.

Mr. Street, a native son of Cadiz, Kentucky, has spent much of his life in Charlotte with the McDevitt and Street Co., the firm he now directs as its secretary and general manager. After graduating from Vanderbilt University, Nashville, in 1922, Mr. Street joined the firm, then known as McDevitt-Fleming Co.

George H. Cheek, of the George H. Cheek Construction Co., Frankfort, succeeded Mr. Walker as president.

Wash. Chapters Elect Officers

The Eastern Washington Builders Chapter elected the following officers for 1954 at its annual meeting:

E. R. Haynes, E. R. Haynes Construction Co., Spokane, president; M. H. Cherf, Cherf Brothers Construction Co. and Sandkay Contractors, Inc., Ephrate. Mr. Haynes succeeds Gus J. Bouten, Gus J. Bouten Construction Co. C. E. Hively continues as executive secretary.

The Spokane Chapter elected John M. Clifton, Clifton and Applegate Co., of Yardley, president for 1954 succeeding Dewey J. Murrow, F. R. Hewett and Co., Parkwater.

Other officers elected include James Crick, Sr., Bair-Crick Co., and Lafe Materne, Materne Brothers, both of Spokane, vice presidents; Walter G. Meyers, Walter G. Meyers and Sons, Spokane, and Mr. Murrow as board members. Sam C. Guess was installed as executive secretary.

Mountain Pacific Chapter, A.G.C., elected V. R. Scheumann, Scheumann and Johnson, Seattle, as president, succeeding Don L. Cooney, Don L. Cooney, Inc., also of Seattle. Mr. Scheumann is head of the firm. W. A. Landaas is secretary-manager of the Far West chapter.

» THE NEBRASKA Building Chapter and the Nebraska Chapter, member groups of The Associated General Contractors of America, held their annual conventions together in Lincoln Jan. 20-21 with over 450 contractors and guests attending.

Principal speakers at the general session included Guy Kiddoo, vice president of the First National Bank of Chicago; J. George Robinson, assistant manager, A.G.C. of Missouri; and Arch N. Carter, manager of the Highway Division and William E. Dunn, manager of labor relations, national A.G.C. staff, Washington, D. C.

At the Nebraska Chapter luncheon, L. N. Ress, state highway engineer, announced that an "even larger" state highway program would be set up for 1955-57 if the funds are acquired.



Outgoing President Miller (left) shown with 1954 President Rorick at Building Chapter meeting.

New officers installed by the Nebraska Chapter, a highway-heavy contractors' group, include William Gerhold Co., Columbus, president; and L. J. Koenig, Grand Island; George Abel, Abel Construction Co., Lincoln; and Herndon Taylor, Grand Island, all vice presidents; and Charles A. Roberts, Roberts Construction Co., Lincoln, treasurer. James Critchfield, Lincoln, is manager. President Gerhold succeeds Clarence Issacson, Norfolk Bridge and Construction Co., Norfolk.

The Building Chapter installed the following officers for 1954: Forrest Rorick, Rorick Construction Co., Omaha, president; H. C. Fricke, Alliance (Nebr.) building contractor, vice president; Homer Gausman, Cooper Construction Co., Omaha, treasurer; and Virgil J. Haggart, Omaha, secretary. President Rorick succeeded John Miller of the Olson Construction Co., Lincoln.

Nebraska Groups Hold Conventions Jointly



New officers of the highway and heavy contractors group shown left to right: seated, President William Gerhold, of Columbus; and Vice President L. J. Koenig, of Grand Island. Standing, Vice President George P. Abel, Lincoln; Treasurer Charles A. Roberts, also of Lincoln; and Vice President Herndon Taylor, Grand Island.

Detroit Chapter Meets, Re-elects Officers



Seated left to right at table during the Detroit Chapter's annual banquet are: First Vice President John W. Armstrong; W. A. Snow, A.G.C. national staff; President A. S. James; and Secretary-Manager Ralph A. MacMullan.

» THE Detroit Chapter of the A.G.C., holding its 38th annual meeting in Detroit's Athletic Club, Jan. 21, re-elected its 1953 slate of officers to continue through 1954.

They are as follows: A. S. James, O. W. Burke Co., Detroit, president; John W. Armstrong, Darin and Armstrong, Inc., Detroit, first vice president; Alfred A. Smith, Alfred A. Smith, Inc., Ferndale, second vice

president; and G. K. Chapman, Walbridge-Aldinger Co., Detroit, treasurer.

Directors include John Cooley, Fred Auch, and C. Russell Slimmon.

Ralph A. MacMullan, secretary-manager of the chapter for 31 years, was re-appointed for this year along with John E. Kinsella, assistant secretary, and Robert J. Pear, assistant to the secretary.

Safer Roads Planned, Missouri A.G.C. Told

• Built-In Safety Features to be Stressed, Highway Official Says

» THE MISSOURI State Highway Commission chairman told the A.G.C. of Missouri, meeting Jan. 13-14 in St. Louis, that his office is planning a highway system that will provide a minimum of traffic hazards and make for safer driving.

This can be done, said Harris D. Rodgers, with the necessary funds to design divided pavements and other safety features where the traffic is heavy and the accident rate is high.

Mr. Rodgers added that his office will let contracts for \$38 million worth of roads by June 30, and another \$17 million in contracts by the year's end.

Col. Delbert B. Freeman, St. Louis division chief of the Corps of Engineers, defended the corps' construction program against "pork barrel" criticism. He said that every project favorably recommended by the engi-

neers had first been studied and found to return benefits greater than the cost.

J. D. Marshall, executive director of the national A.G.C., presented to the meeting a national picture of general contractors' problems. He was followed by C. L. Motl, maintenance engineer of the Minnesota Department of Highways, who presented a comprehensive discussion of highway maintenance.

[Ed. Note: *The Constructor* carried an extensive article by Mr. Motl on this subject in the January issue, beginning on page 36.]

Twenty members of the chapter were presented safety awards for working last year without any lost-time accidents.

New officers installed included H. W. Masters, Masters-Jackson Paving

Co., Springfield, president; Dale W. Maxwell, Maxwell Bridge Co., Columbus, vice president; E. W. Menefee, W. J. Menefee Construction Co., Sedalia, re-elected treasurer. E. C. L. Wagner continues as secretary and manager, with J. George Robinson as his assistant. Retiring president is Robert M. Hoover, Kansas City Bridge Co., Kansas City.

Directors for the new year are B. W. Tibbs, F. E. Dawkins and F. L. Carswell, bituminous division; Mr. Maxwell, James Gould and W. T. Clark, bridge division; Joseph L. Pohl, Morris E. DeWitt and Mr. Menefee, first grading division; Frank Trager, G. J. Stoelting and Joseph J. Griesemer, second grading division; John E. Davidson, J. S. Maitland and H. J. Massman, Jr., heavy division; and F. E. Rolfe, D. J. Kane and Murray Windle, paving division.

St. Louis A.G.C. Officers

The A.G.C. of St. Louis recently elected officers for 1954. John P. Soult, Fruin-Colnon Contracting Co., was named president, succeeding H. C. Schenler, Ben Hur Construction Co.

Joseph E. Latta, J. E. Latta Construction Co., was elected vice president of the building division; and G. J. Alberici, Alberici Construction Co., was named vice president of the heavy-highway division.

Other officers include: A. J. Alport, Alport Construction Co., secretary; Leonard Hamm, Dan Hamm Drayage Co., treasurer; P. T. George, Gamble Construction Co., vice president of the building division; and Carl Pearson, Conduit Contracting Co., Inc., vice president of the heavy-highway division.

Directors include R. E. MacDonald, MacDonald Construction, representing building division; and Fred J. Luth, Fred M. Luth and Sons, Inc., representing the heavy-highway division. Affiliate member directors are O. B. Avery, Jr., O. B. Avery Co.; and Len A. Maune, Len A. Maune Co.

The Louisville Chapter, at its annual meeting in January, elected the following officers for 1954: F. William Schoettler, Struck Construction Co., president; Edward T. Sullivan, Sullivan and Cozart, first vice president; Donald Bornstein, Ale Bornstein, Inc., second vice president; and K. A. Barker, Jr., Louisville Asphalt Co., treasurer.

Michigan A.G.C. Chapter Elects Officers

» MORSE R. Heineman, J. R. Heineman and Sons, Saginaw, was elected president of the Michigan Chapter, A.G.C., at the group's membership meeting Jan. 28, in Lansing. He succeeded Karl B. Foster, a building contractor from Flint, who continues as a director.

Other officers elected included Marshall J. Hungerford, Hungerford Construction Co., Jackson, vice president; Henry Reniger, Reniger Construction Co., Lansing, who was re-elected treas-

urer and George W. Combs, who continues as secretary-manager.

Newly elected members of the board of directors include: Harry L. Conrad, Jr., Flint; Henry deKoning, Ann Arbor; Ernest Schillinger, Benton Harbor; and Peter J. Elzinga, Holland, who was re-elected for three years.

Guest speaker at the meeting was George L. Bortz, vice president of the Fidelity and Deposit Insurance Co. of Maryland.



Michigan A.G.C. officials shown during membership meeting are as follows, left to right: Ralph A. MacMullan, secretary-manager, Detroit chapter; President A. S. James, Detroit Chapter; President Heinemann, Michigan Chapter; and Secretary-Manager George W. Combs, Michigan Chapter.

BACK OF THIS PUMP STANDS..

The GORMAN-RUPP Guarantee

Our distributors are authorized to put a Gorman-Rupp Contractors' Pump on any pumping job, any time, anywhere, alongside any other make pump, size for size. The Gorman-Rupp pump is guaranteed to pump more dirty water more hours, using less gasoline and to prime quicker than any other self-priming pump. If it isn't the best all around pump, our distributor will accept the return of the Gorman-Rupp pump and pay the user any installation expense incurred.

WHAT ELSE
CAN YOU BUY
SO
CONFIDENTLY?



GORMAN-RUPP
125 M PUMP

Designed by experienced pump engineers, built by expert craftsmen, thoroughly tested in the factory and proven in the field.

The Gorman-Rupp is built for long, hard service. The greater capacity when working against high heads is most important. Streamlined inside, no by-passes or valves, no efficiency lost in pumping and a minimum of maintenance insures against loss of time and results in greater profit to the contractor.

Ask for
Contractors' Pump Bulletin No.4-CP-11



THE GORMAN-RUPP COMPANY
MANSFIELD, OHIO

ADVERTISEMENT

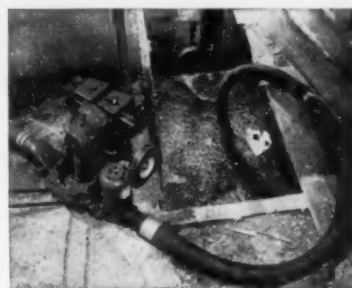
CONTRACTORS LOOK FOR MOST DEPENDABLE PUMP

Contractors are quick to recognize the advantages of having the best equipment possible on construction jobs. Any saving of time in completing a contract is a saving in man hours and also frees his equipment for the next job. Dependable pumps are a necessity on any job that involves drainage or the movement of water.

The Gorman-Rupp Company of Mansfield, Ohio, specializing in pumps only, guarantees that their pumps will out-perform any pump of comparable size and type on the market.

These self-priming centrifugal pumps have long led the field in performance and dependability. The new Gorman-Rupps are the result of years of study and research in the field and in the laboratory.

Gorman-Rupp blue pumps are a common sight on tough pumping jobs everywhere. Their greater capacity when working against high heads, their great simplicity, their trouble-free operation and rugged construction make them a great favorite with contractors.



FIELD NOTES on the GORMAN-RUPP DIAPHRAGM PUMP in a SLAUGHTER HOUSE!

Before the men at a Berlin Heights slaughter house heard about the Gorman-Rupp diaphragm pump, they used to flip a coin to decide which unfortunate individual got the repulsive job of cleaning out the pit into which all of the blood and other waste matter of the slaughter house drained.

The pit was about 8 feet square and 10 feet deep. The liquid was to be pumped into a storage tank which at the time the pump was installed was in the construction stage. This tank would be placed about 30 feet from the pit. The Gorman-Rupp 3D-8R6 diaphragm pump was placed at the side of the pit, making a 10-foot suction lift and a 30-foot discharge.

In order to prove the Gorman-Rupp diaphragm pump's ability to pump the liquid, the discharge hose was curled around and back into the pit. The diaphragm pump handled the liquid and waste materials smoothly, easily, and quickly.

The unit is self-priming and required no attention except supplying of fuel and starting or stopping.

THE GORMAN-RUPP COMPANY
MANSFIELD, OHIO

Governor Sees Less Public Construction



Shown at the chapter's banquet are the following left to right: seated, Admiral Jelley; Past President James M. Jarvis; and President Paul R. Anderson. Standing: W. T. Coleman, Charleston, chairman of the associate division; Frank H. Bisping, Clarksburg, chairman of the building division; and Vice President Robert Y. Hayne.

» GOVERNOR William C. Marland told the annual meeting of the A.G.C. of West Virginia, Jan. 8-9, in Charleston, that general contractors in the coming days will see less state public works construction.

In his address before a luncheon meeting of the chapter, Gov. Marland said that the state budget can't afford the work needed and that the backlog of work brought about by the war years is nearing completion.

Executive Director J. D. Marshall, national A.G.C., told the luncheon that contractors must give greater emphasis to selling their work in the coming days of greater competition.

The convention ended with a banquet at which Rear Admiral Joseph F. Jelley, Jr., chief of construction for the Defense Department, was the guest speaker.

New officers installed included Paul R. Anderson, Anderson's Inc., Charleston, 1954 president, succeeding James M. Jarvis, Jarvis-Courtney Corp., Clarksburg; D. R. Agnew, Agnew Construction Co., Ronceverte; Robert Y. Hayne, Hayne Engineering Co., Charleston; Arthur Ritchie, Boso and Ritchie, Ravenswood; Walter W. Seabright, Seabright Construction Co., Wheeling; and C. H. Jimison, C. H.

Jimison and Sons, Huntington, vice presidents; Charles J. Kuhn, Kuhn Construction Co., Charleston, secretary; and W. E. Abbitt, W. A. Abbitt Co., Charleston, treasurer.

Wilson and Tellepsen Head Local Chambers

» IN RECENT weeks Mark K. Wilson, Jr., Chattanooga, and Howard T. Tellepsen, Houston, active in local chapters and national A.G.C. affairs, were elected presidents of their respective Chambers of Commerce for 1954.



Mr. Wilson

He was also a national director of the association in 1952-53, and chair-

man of the Endorsements Committee, vice chairman of the Public Relations Committee, and a member of the Finance and Labor Committees last year. The previous year he served on the Accident Prevention, Finance, and Public Relations Committees.

man of the Endorsements Committee, vice chairman of the Public Relations Committee, and a member of the Finance and Labor Committees last year. The previous year he served on the Accident Prevention, Finance, and Public Relations Committees.

Mr. Tellepsen was president of the Houston Chapter, A.G.C., in 1950 and served on the national association's Membership Committee in 1951 and the Public Relations Committee in 1952. He is the second former chapter president to head the Houston chamber. Warren S. Bellows, chapter president in 1940, also was chamber president.



Mr. Tellepsen

Oklahoma Builders Meet

The Oklahoma Builders Chapter, A.G.C., met January 16, in Oklahoma City and elected new officers for 1954.

John M. Dunning, Charles M. Dunning Construction Co., was elected president, succeeding Henry R. Lohmann, H. R. Lohmann Co., Tulsa.



Mr. Dunning

Walter Nashert, Walter Nashert Co., Oklahoma City, was named first vice president; John Bond, Ditmars - Dickmann-Pickens Construction Co., Okmulgee, became second vice president; and H. R. Jensen, Builders Construction Co., Oklahoma City, was named secretary-treasurer.

New board members include: Fred Anderson, J. J. Bollinger, Haskell Culwell, W. R. Grimshaw, Jr., D. A. Harmon, and Edmund Wells. Mrs. Ruth Ann Leslie continues as executive secretary.

The convention, held in the Skirvin Hotel began with a board of directors meeting, then had a luncheon meeting, followed by a general session in the afternoon. An evening banquet completed the program.

The civic and business leadership of the Wilsons did not go unnoticed in the press.

The *Chattanooga News Free-Press*, in an editorial recently, said of the two Wilsons: "In addition to their valuable contributions to the business life of the city, the Wilsons have both been willing workers and leaders in civic and charitable causes. Their good citizenship has been exemplary."

At the same time the *Chattanooga Times* had this to say: "To Mark Wilson, Jr., civic leader and tireless worker on behalf of this community, has come a richly deserved recognition in the form of election as president of the Chattanooga Chamber of Commerce. If we know Mr. Wilson, however, we believe he is certain to consider the post as a challenge for action, as opportunity for wider service."

Mont. Chapters Meet Jointly

The Montana Contractors' Association, Inc., and the Montana Building Chapter, Inc., the A.G.C.'s two chapters in that state, held annual meetings jointly in Butte, Jan. 9-10.

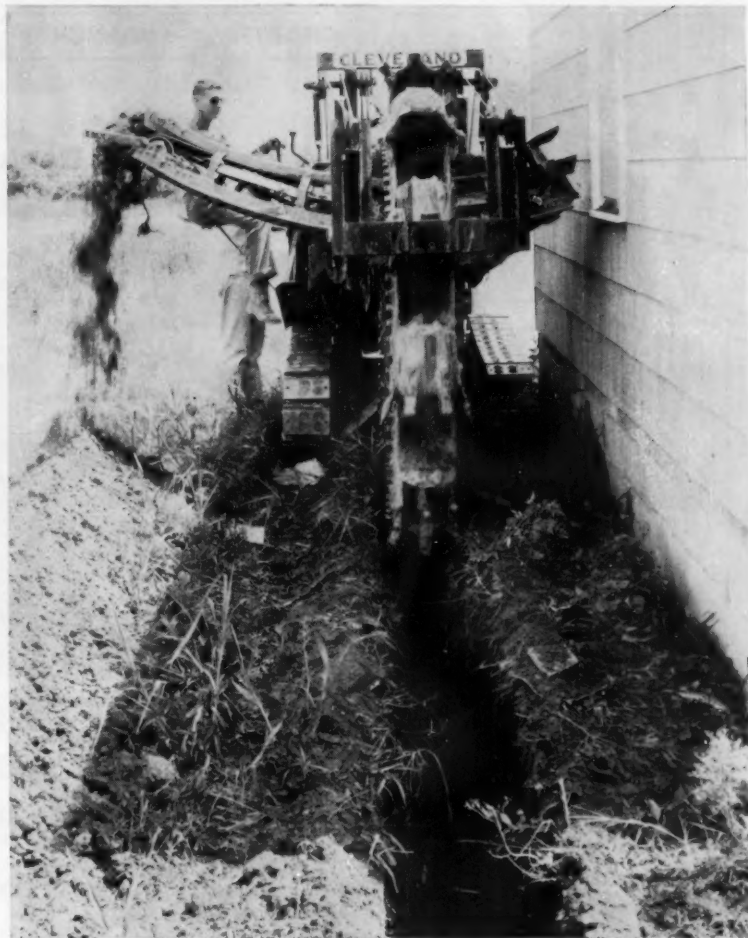
Boards of directors of the two groups met before the convention formally opened to discuss mutual problems. Following this, E. J. Decker, McKinnon-Decker Co., Helena, retiring president of the building chapter, called the convention to order. The following day Edward M. O'Neil, O'Neil Construction Co., Havre, president of the contractors' association, presided over the last session of the convention.

Mr. O'Neil, along with Vice President Stephen A. Birch and Treasurer Frank Fly were re-elected to their posts in the contractors' association.

The Montana Building Chapter elected new officers in Frank P. Messmer, Haggerty-Messmer Co., Bozeman, president; Charles D. Holm, Holm Construction Co., Glendive, vice president; and L. G. Hardy, Cahill-Mooney Construction Co., Billings, treasurer. J. W. Marlow remains as secretary-manager for both groups.

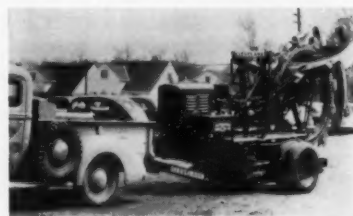
Approximately 300 delegates and guests from throughout the state attended the meeting.

Though the chapters operate under separate A.G.C. charters, they are closely allied. They share the same office in the Placer Hotel, Helena, and have the same secretary manager in J. W. Marlow.



20" from Trench to Wall

IN NORFOLK, VA. this Model 92 CLEVELAND "Baby Digger" shows how its useful compactness enables it to place a trench safely within 20" of a house wall. Balanced perfectly on its smooth full crawlers, the 92 maneuvers easily in even the closest quarters, with less damage to lawns, walks and driveways. Because it digs any size of trench from 10 to 20 inches wide and up to 5 feet deep, it is usable on a wide variety of jobs.



The 92 hustles safely from job to job . . . at legal limit speeds . . . because it's so easily portable on the drop-axle, tilt-bed CLEVELAND T5 Trailer.

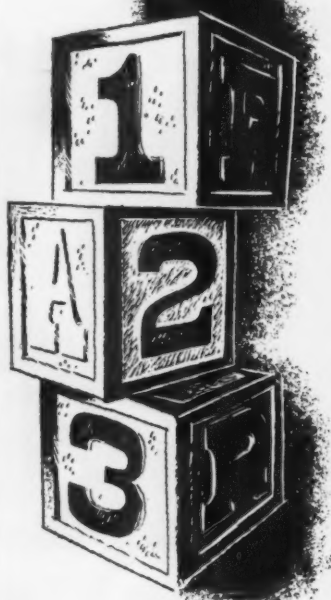
Write for descriptive literature and specifications or get the full story on CLEVELANDS from your local distributor.



THE CLEVELAND TRENCHER CO.

"Pioneer of the Modern Trencher"

20100 ST. CLAIR AVENUE • CLEVELAND 17, OHIO



SPEAKING OF CONSTRUCTION,

here are the three foundations on which to base your selection of the company that will issue your contract bonds. One, be sure that company is financially strong. Two, be sure that company prides itself on prompt service. Three, be sure that company can offer you preferred rates which so often mean the difference between a successful and unsuccessful bid. There's no earthly reason why you should settle for less.

HEAD OFFICES: 401 Walnut St., Philadelphia 6, Penna. Branches in Atlanta, Chicago, Dallas, New York, San Francisco, Toronto. Claims and Settling Agents throughout the world.



Fire Association

Symbol of Security



Reliance

INSURANCE COMPANIES OF PHILADELPHIA

PROPERTY AND CASUALTY
INSURANCE—SURETY BONDS

CHAPTERS • BRANCHES

Kansas Builders Review 1953 Labor Problems

• Hunter Succeeds Blaser as President, Other Officers Installed



Officers of the Kansas Chapter, Builders Division, shown above are, left to right: Cecil D. Hunter, O. D. Milligan Construction Co., president; Charles Bennett, Bennett Construction Co., Topeka, treasurer; Joseph Rauh, Busboom and Rauh, Salina, director; and Alanson Foreman, Hahner and Foreman, Inc., Wichita, director. (Manhattan, Kans., Mercury-Chronicle).

» A REPORT on recent developments in construction labor problems and the installation of new officers occupied top spots on the agenda of the Kansas Chapter, Builders' Division, during the 12th annual convention, Feb. 6, in Manhattan.

Cecil D. Hunter, O. D. Milligan Construction Co., Manhattan, took over as president, succeeding Frank E. Blaser, Frank E. Blaser Building Co., Wichita.

Attorney Reports

Reporting on labor-management relations was Don Hulst, an attorney from Lawrence who represented the chapter during the 1953 session of the Kansas Legislature. Mr. Hulst reported on the outcome of proposals submitted during the last session.

Kenneth R. Lewis, secretary-manager of the chapter, told the meeting that for some time the association has been considering ways of obtaining trained officers and job-site personnel. Both the state university and state college offer engineering and architectural courses, but neglect the building phase of construction. The chapter has considered setting up scholarships, but most members feel that scholarships in the engineering or architecture schools would not serve the purpose, he added.

Difficulties between some general contractors and the plumbers' union over the temporary heating of buildings also were discussed at the meeting.

Three Kansas firms were given spe-

cial recognition for being members of the Kansas Chapter, Builders' Division since it was formed 20 years ago. They are the Bowers Construction Co., Topeka; Green Construction Co., Manhattan; and the Lundgren Construction Co., Topeka.

President Hunter was introduced by Charles Bennett, who substituted for retiring president Blaser, unable to attend. Other officers installed included Tom Constant, Constant Construction Co., Lawrence, vice president; and Alanson Foreman, Hahner and Foreman, Wichita, a director.

Philadelphia Chapter Meets

At the recent annual meeting of the Philadelphia Chapter, A.G.C., the following officers were elected:

John W. English, Frank G. English and Sons, president; Henry E. Baton, Jr., Baton Construction Corp., first vice president; R. M. Shoemaker, R. M. Shoemaker Co., second vice president; and Thomas S. Keefer, E. H. Keefer and Son, treasurer.

Directors include: Allen D. Cornell, Howard A. Schroedel, Charles H. Fleming, James K. Wark, James J. Clearkin, David M. Hunt, Perry J. Goldman, John S. McQuade, Jr., B. Paul Cotter, Joseph R. Farrell, Sr., William R. Hughes, Jr., and John McShain.

The HELTZEL TYPE-TWO PLANT



BIG PRODUCTION *Where You Want It!*

This is no "Fancy Dan" piece of equipment. It's a big 200-ton capacity husky that can be quickly erected and dismantled, moved from job to job in large, easy-to-handle sections.

It's fast and accurate . . . no holdups or fouled batches. It's the big, versatile, hard-working plant designed to keep pace with modern concrete construction. It takes any

type batcher, including the new Heltzel Automatic Push Button.

If you're in the market for big, high-production, portable equipment, check this Heltzel Type-Two Plant before you buy. It's available in the cement-aggregate design, or for aggregates alone. There are batchers, cement plants, elevators, conveyers—everything you'll need, designed to work with it.



THE
HELTZEL

STEEL FORM

and IRON CO.

4600 THOMAS ROAD
WARREN
OHIO

Please send latest Batching Plant literature to:

Name _____

Company _____

City _____ State _____



Field assembly of Monotube piles is quickly and easily accomplished using a "come-along" with two cable chokers.



Driven pile being cut off at proper height. Use of cut-off sections as extensions minimizes waste.



Welding extension to driven base section of pile on right while driving of pile on left continues. No lost time.

How **MONOTUBE PILES** meet the need for **VARIATION IN DRIVEN LENGTHS**

UNLESS you've already had first-hand experience with Monotube piles, you might be amazed at how their "easy field extendibility" pays off. Engineers and contractors are taking advantage of it on job after job . . .

Many contractors set up a simple welding rack to do their own field assembly right on the job, thereby furnishing the driver with one-piece piles to approximate required length.

Another procedure is to weld on extensions as driving progresses. While one pile is being extended, driving continues on an adjacent pile. No lost time.

Such practices are completely practical with Monotubes because they combine light weight and easy handling with cold-rolled high strength. Weld-splicing goes easy and fast. No difficult welding operations.

Get the facts on *all* cost-important Monotube features. Write to The Union Metal Manufacturing Co., Canton 5, Ohio.

Monotube Foundation Piles

UNION METAL

Truck Mixer—Construction Machinery Co., Waterloo, Iowa. 1954 "Transcrete" mixers feature new rear-end controls, newly designed drum brake, improved chain drive and outswinging charging hopper. Another feature is new right-angle drive. Power from Ford or Chrysler automotive-type engines flows through heavy-duty transmission into modified truck rear axle. Here direction is changed 90° and power is transmitted to mixer drive pinion. Design compensates for flexing from direction change or twisting. Drum is large in diameter and has deep "L" section blades arranged in progressively increasing spiral. Mixer is designed with low center of gravity and weight is distributed to provide for easy handling. New "Transcretes" will be available in 3½, 4½ and 5½ cu yd. sizes. Comprehensive bulletin on new machine is available from manufacturer.



New Construction Machinery "Transcrete" truck mixer.

Tractor—Caterpillar Tractor Co., Peoria 8, Ill. DW15 150-h.p. 4-wheel tractor is powered by Caterpillar 6-cylinder D326 diesel engine producing 150 h.p. at 1,800 r.p.m. with 5½" x 6" bore and stroke. Standard transmission provides 10 forward speeds up to 24 m.p.h. and 2 reverse up to 3.3 m.p.h. Optional final drive gears make possible speeds up to 31.3 m.p.h. Large capacity wheel brakes are foot-pedal-controlled and have compressed air boosters. When brakes are applied,



Caterpillar DW15 4-wheel tractor.

those on pulled unit are actuated automatically just before prime mover brakes take hold. This provides anti-jackknife protection. Flywheel clutch has air booster which reduces clutch pedal pressure when engaging and disengaging dual 16" metallic clutch plates. Wheelbase dimension of DW15 is 121½". Front tire sizes are 12.00 x 20, 14-ply traction type. Rear tires are 21.00 x 25, 20-ply rock type. Over-all length of tractor is 16'8". It has gasoline starting engine with 6-volt electric starter. Tractor is designed for use with Caterpillar No. 15 scraper, No. 10 scraper and W10 wagon.

Track Roller Frame—Caterpillar is now making new heavy-duty track roller frame and special large idlers for 60" gauge D4 track-type tractor, designed for operations where rugged terrain is encountered such as bulldozing and logging. There are heavier "boxed-in" frames and replaceable wear strips for front idler hold-down bearings.

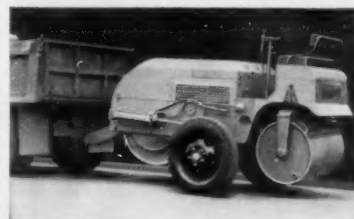
Dragline-Crane—Osgood-General Excavator Co., Marion, Ohio. Model 327 is General one-yd. dragline, or 17-ton lifting crane. It features roller-bearing-mounted hoist drums, roller-bearing mounted hook swing rollers, anti-friction bearings on superstructure main shafts, independent boom hoist, with power up and power down, enclosed deck gears, machine-cut gear teeth, flame-hardened gears where extra stress occurs. Swing gear in crawler frame is made separate from crawler frame and has machine-cut teeth. Optional features are independent travel, torque converters and fluid couplings, rapid folding and back-hitch high gantry, boom stops for safety, different widths of tread belts and various combinations of boom point sheaves. Machine is manually controlled. It has 12'10" long crawler. Standard width is 11'. Standard boom is 45' long, all-welded with heavy tubular lacing, available as flange or pin-connected.

Shores—The Patent Scaffolding Co., 38-21 12th St., Long Island City 1, N. Y. Burton's all-steel shores, with tamper-proof locking at desired height, are now available through Patent Scaffolding Co. distribution system. Burton shore features slotted adjusting pin guide and permits addition of 8" or 14" U-heads without dismantling.

For rough adjustments, shore provides adjusting holes, 5½" apart. Close adjustments are made by turning 8" long handle of adjusting collar. Collar locks in position at any height. Standard shores have 7" x 7" base plates and 7" x 7" heads and 8" or 14"-long U-heads fit into top of tube without square plate being removed. They are available in 4 sizes, from 9'10" to 16' when fully extended. Complete information is given in Bulletin M-2, available from Patent Scaffolding Co.

Gravel Plant—Pioneer Engineering Works, Inc., Minneapolis 13. Model 33G "Triplex" is designed for use in areas where pits contain relatively high percentage of big boulders. Plant has 18" x 30" primary jaw crusher and Pioneer's 30" x 18" triple roll secondary crushing unit. All major units of plant are mounted on single chassis. Other basic units are single-deck, plate scalping screen, 1½-deck secondary vibrating screen, hopper, mechanical feeder and necessary conveyors. Total weight of plant (less power unit) is approximately 71,000 lbs. Moving weight (less power unit, swivel feed conveyor, mechanical feeder and side delivery conveyor) is approximately 17,600 lbs. on front axle and approximately 40,100 lbs. on rear axle assembly. Travel length of plant (less towing hitch) is 43', travel width is 9'8", travel height is 12'6".

Roller—The Galion Iron Works & Mfg. Co., Galion, Ohio. Variable-weight (4-6 ton) tandem rollers are equipped with set of hydraulically retractable roller-bearing, rubber-tire transport wheels to permit towing of roller behind truck. Fingertip hydraulic control permits easy raising of complete roller unit off ground. Built-in hydraulic jack in truck hitch raises compression roll and retractable transport wheels raise steering roll. Both hydraulic operations are powered by engine-driven pump.



Galion variable-weight tandem roller



PHOTOGRAPH BY RICHARD BEATTIE

What are the facts about cancer of the lung—?

JUST 20 YEARS AGO, in 1933, cancer of the lung killed 2,252 American men. Last year, it killed some 18,500.

WHY THIS STARTLING INCREASE? Our researchers are finding the answers as rapidly as funds and facilities permit—but there isn't enough money.

DOCTORS ESTIMATE that 50% of all men who develop lung cancer could be cured if treated in time. But we are actually saving only 5% . . . just one-tenth as many as we should.

WHY—? Many reasons. But one of the most important is not enough money . . . for mobile X-ray units, for diagnosis and treatment facilities, for training technicians and physicians.

THESE ARE JUST A FEW of the reasons why you should contribute generously to the American Cancer Society. Won't you please do it now? Your donation is needed—and urgently needed—for the fight against cancer is *everybody's* fight.

Cancer MAN'S CRUELEST ENEMY Strike back—Give

AMERICAN CANCER SOCIETY

GENTLEMEN:

- ☐ Please send me free information on cancer.
☐ Enclosed is my contribution of \$..... to the cancer crusade.

Name.....

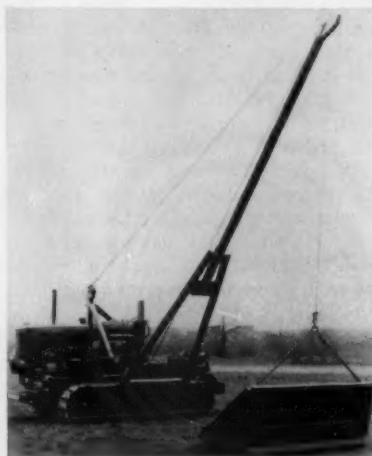
Address.....

City..... State.....

Simply address the envelope: CANCER
c/o Postmaster, Name of Your Town

NEW EQUIPMENT • MATERIALS

Backfiller—The Cleveland Trencher Co., 20100 St. Clair Ave., Cleveland 17. Model 190 is one-man-operated backfiller for pipelines and heavy construction work. Employing 7' backfill board, it backfills as it travels. Long, wide crawlers give machine ground bearing pressure of 6.2 lbs. per sq. in. It has double-rimmed sprockets, wheels and rollers, anti-friction bearing mounted. Over-all width of machine is 8' not including boom. It is 15' long and 9'10" high and weighs approximately 22,500 lbs. Transmission provides 48 crawler speeds from 1' per minute to 4.3 m.p.h. in either direction. It is powered by 467 cu. in. diesel engine which develops 79 h.p. at 1,400 r.p.m. Machine is equipped with large hydraulic-actuated clutches with vacuum boosters. Four separate transmission-controlled line speeds are available for pull-in and throw-out cables, ranging from 47' to 450' per minute. Boom hoist and tow winch are hydraulically operated. Adjustable boom can be telescoped from 19' to 27'. It can be removed for 8' hauling width. As side crane, Model 190 has 50,000 ft. lb. capacity figured from edge of crawler, 10,000 ft. lb. 5' out, 5,000 10' out.



Cleveland Model 190 backfiller

Paver Charger—The Thew Shovel Co., Lorain, Ohio. TL-25 "Charge-a-Paver" is front-end attachment for crawler-mounted TL-25 turntable. It consists of box-like pan, 10' long, 6' wide, 14" deep, which may be crowded and retracted on telescopic boom to transfer materials from batch trucks outside subgrade to paver. Booklet on attachment is available from manufacturer.

Shovel—American Hoist & Derrick Co., 63 S. Robert St., St. Paul 1. Alternate rope crowd front for Model 375 3/4-yd. shovel features box-section type boom with large-diameter boom point sheaves and wide rugged cast steel boom foot. Pitch angle of dipper can be changed to suit operator by removing one pin and replacing it at new angle.



American Hoist Model 375 with alternate rope crowd front.

Compactor Power Float—Kelley Machine Division, Wiesner-Rapp Co., 1600 Seneca St., Buffalo 10. Portable machine is designed for compaction-floating of harsh, dry concrete or asphalt mastic mixes. It consists of vertical power head which provides power through special alloy steel gearing for rotation of heavy float disc. Four cast steel hammers are pivoted on shafts attached to body of machine. Heads of hammers ride on cam track on balanced float disc. As disc rotates, hammers are raised and dropped.

Engines—Detroit Diesel Engine Division, General Motors Corp., 13400 W. Outer Drive, Detroit 28. Several changes have been made in G.M. unit fuel injectors used in Series 71 diesel engines. Injector valve assembly has been moved from former location within spray tip to higher position to lessen its exposure to high cylinder temperatures. Head of new injector valve is now square and maintains former valve's crowned surface to insure maximum seat sealing. Increased protection against compression pressure and heat is provided for valve spring through relocation of check valve below instead of above spring. New spray tip was designed to accommodate check valve. Number of wearing parts in follower assembly, which transmits motion from rocker arm to injector plunger, have been reduced. Follower spring is now heavier and stronger. New plunger and bushing

assembly provide smoother and more complete fuel combustion while engine is operating at part load. They are known as "High Valve" injectors and are marked "HV6," "HV7" or "HV8," indicating new units of 60, 70 or 80 mm³ capacity, respectively. New engines have improved injectors as they leave factory, and parts kits are available to incorporate same improvements into injectors now in use.

Drill—Joy Manufacturing Co., Henry W. Oliver Bldg., Pittsburgh 22. "Challenger" blasthole drill will drill 4½" diameter holes to depths of 50' or more in any type of formation, including hard igneous or metamorphic rocks, manufacturer states. It is 5¼" hammer-type drill, mounted on 26' feed to give 20' steel changes. It is available with choice of 3 mountings: TWM-2, comprising 3-wheeled chassis, self-propelled by commercial tractor power unit and equipped with hydraulic pump, for raising and lowering mast, and integral dust collector; TWM-2A, 3-wheeled chassis unit self-propelled by 2 reversible piston-type air motors and equipped with hydraulic system which is also air-powered; TWM-3, composed of drill and feed and necessary brackets for mounting on drill operator's own crawler-mounted tractor. Drill uses 2" round sectional steel with ¾" air hole. It features improved "drill and blow," Joy feature which permits simultaneous drilling and blowing; force-feed lubrication; replaceable cylinder lines; replaceable bushings at all wearing areas.



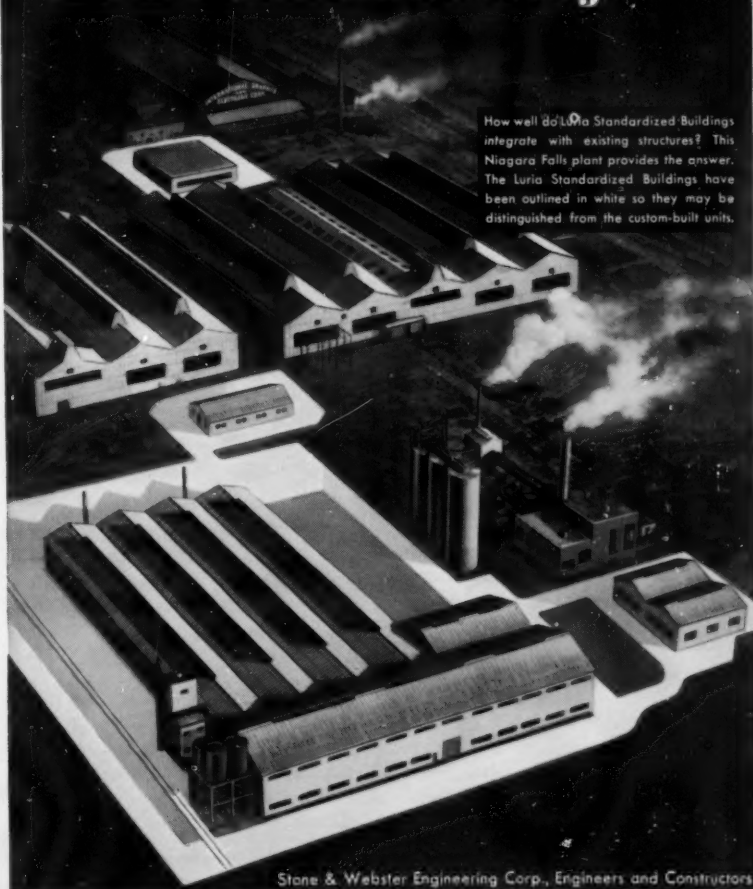
Joy "Challenger" blasthole drill.

ANOTHER INDUSTRIAL LEADER...

INTERNATIONAL GRAPHITE & ELECTRODE DIV.
SPEER CARBON COMPANY

chooses

LURIA Standardized Buildings



How well do Luria Standardized Buildings integrate with existing structures? This Niagara Falls plant provides the answer. The Luria Standardized Buildings have been outlined in white so they may be distinguished from the custom-built units.

Stone & Webster Engineering Corp., Engineers and Constructors

The LURIA system of **STANDARDIZATION** lowers your building costs and adds **high speed** to your expansion program

All the advantages of custom-built units are included in Luria Standardized Buildings. Designed for *durability*, Luria structures surpass the most stringent building code regulations. And Luria's standardized components are engineered for

adaptability. They combine to successfully meet *individual* architectural needs. If these are the requirements of *your* expansion program, Luria can provide them for you... at less than the cost of custom-built units and in far less time.

LURIA ENGINEERING Company

511 FIFTH AVENUE, NEW YORK 17, N. Y.

District Offices: ATLANTA • PHILADELPHIA • BOSTON • CHICAGO • WASHINGTON, D. C.

Axle—Eaton Manufacturing Co., 739 E. 140th St., Cleveland 10. New Model 32M tandem axle has load capacity of 32,000 lbs. on rear tires at ground. Feature of tandem axle is inter-axle differential. This third differential in power divider assures equalized power transmission to driving wheels even though wheel speeds may be variable due to road irregularities or differences in tire diameter. Power divider is integral part of forward axle.



Eaton 32M tandem axles in bogie.

Wellpoint—Foundation Equipment Corp., 10-11 38th Ave., Long Island City 1, N.Y. Wellpoint of new design will be marketed under name "Free-flow." Screen assembly has no contact with inner pipe, so that it cannot rust to pipe. Screen assembly is self-contained unit consisting of fine filtering wire cloth held rigidly in place between inner slotted brass tube and outside perforated brass jacket. No internal supports of assembly are necessary. When pumping, fine inner mesh screen cannot pull away from outer perforated brass screen to permit entrance of sand or silt.

Paving Breakers—Joy Manufacturing Co., Henry W. Oliver Bldg., Pittsburgh 22. Bulletin 87-P presents economy and operating features of "Silver Streak" paving breakers. Exclusive Joy developments, such as cadmium plating and patented dual valve, are described. Bulletin also describes air compressors, rock drills and other related tools.

Tractor Service—Caterpillar Tractor Co., Peoria 8, Ill. *Your Job, Your Equipment and Caterpillar Service* is title of booklet, Form D410. It depicts service facilities of Caterpillar dealers and tells story of shop service and field service with photos showing use of modern equipment and power tools.

Scaffolding—Patent Scaffolding Co., 38-21 12th St., Long Island City 1, N. Y. *Scaffolding Methods* is new 4-page quarterly publication devoted to modern scaffolding techniques. "Word-picture" stories tell how scaffolding problems on various building projects were solved. In addition to giving information on construction volume, publication will present new scaffolding products . . . Bulletin G-206-R is guide to steel and aluminum scaffolds for building construction and repair. It shows how "Trouble Saver" sectional scaffolding is used for bricklaying, plastering, shoring, rolling scaffolds and hoisting towers.

Hoisting Equipment—Sasgen Derrick Co., 3101 Grand Ave., Chicago 22. Derricks, hoists, winches and elevating and hoisting equipment are presented in new bulletin. Illustrations, descriptions and specifications are given.

Earthmoving Equipment—Allis-Chalmers Tractor Division, Milwaukee 1. Complete line of Allis-Chalmers industrial equipment is pictorially described in revised general line catalog. It has been expanded to 36 pages to include illustrated information and data on HD-15 crawler tractor. Illustrated and described along with crawler tractors and wheel tractors are motor graders, motor scrapers and wagons and expanded line of pull-type scrapers. Section is devoted to pictures and data on selection of allied equipment and attachments engineered for use with A-C equipment . . . Model D motor grader is presented in separate catalog. Job photos show it in operation on construction and maintenance of roads and streets. Illustrations include cut-away views of complete machine and of its 50-h.p. "Power-Crater" engine. Mechanical and construction features of grader are also pictured. Illustrations and data are included on optional equipment.

Blades—Shunk Manufacturing Co., Bucyrus, Ohio. Booklet describes complete line of Shunk snow plow, grader, maintenance and drag blades, as well as offset blades, end or wear boots, moldboards and sawtooth blades. Featured is new special alloy steel "Rhino" blade for bulldozers and scrapers.

Engines—Harnischfeger Corp., Diesel Division, Crystal Lake, Ill. Series of bulletins cover full line of P&H diesel engines. They give condensed information and specifications. There is separate bulletin for each diesel with pictures of each model. Marine engines are covered separately.

WALTON'S FAMOUS *EverForm* PLASTIC SURFACED CONCRETE FORM PANELS provide maximum re-use value in all types of concrete form work. The sleek, durable, diamond-hard surfaces assure super-smooth concrete, longer "on the job" service and the ultimate in re-uses. The inner core of *EverForm* panels is waterproof (EXT-DFPA) Douglas Fir Plywood. Produced by one of the nation's pioneer Fir Plywood manufacturers.

Samples on request

WALTON PLYWOOD COMPANY, INC.

General Sales Office
644 East 38th Street—Suite #205
Indianapolis 5, Indiana

Mill and General Offices
Everett, Washington

Loader—Le Roi Co., 1706 S. 68th St., Milwaukee 14. Bulletin on Le Roi-Transo TLF-150 1½-yd. loader shows machine at work, presents design and safety features. One page discusses TL-100 1-yd. model. Detailed specifications are given for both units.

Mixers—Le Roi bulletin on new Le Roi-Transo mixers shows them working with open end, "Standard" closure or "Deluxe" seal. Keyed photos show features. It shows many of trucks which can be mounted under mixers. Specifications are included for all 7 models of mixers. Complete dimensions are shown along with information on capacities, water systems, power units and weights.

Paneling—Marsh Wall Products, Inc., Dover, Ohio. Catalog presents "Marlite" prefinished wall and ceiling panels, planks and blocks and other Marsh products. Included for first time is description of Marlite plank and block, new paneling which eliminates division mouldings and adhesive. Also included is page on new "Kore-lock," special hollow-core paneling for new construction. Illustrations show typical interiors, both in new construction and remodeling. Complete line of mouldings and installation accessories are included and installation procedures are given.

Masonry Water-Repellent Compound—Dewey and Almy Chemical Co., Construction Specialties Division, Cambridge 40, Mass. Booklet presents "Daracone," silicone resin water-repellent compound for above-grade exterior masonry. It shows how silicones work and shows how use of water repellent reduces maintenance costs and preserves structures. Job specifications for use of compound are given.

Dragline Bucket—Page Engineering Co., Clearing Post Office, Chicago 38. Catalog RL-154 presents "RL" class light-weight automatic dragline bucket. Features are pictured and explained and specifications are given.

Loader—Austin Division, Central Ohio Steel Products Co., Galion, Ohio. Austin "Overshot" loader models 4-C and 6-C are presented in booklet. Action photos and line sketches show mechanical features. Operating principles are discussed.

The Name **HOPE'S** Guarantees

Lok'd Bar FACTORY SASH

The strongest factory sash you can buy. "Lok'd Bar" design gives greater strength for its weight of metal. Stouter construction increases resistance to wear, tear and corrosion. Saving in upkeep cost, trouble-free operation and saving in heat losses more than return its small added cost to the owner.

Broad, double contacts on accurate surfaces abolish drafts, save heat. Weathering flanges have no raked-on strips to corrode and break loose.

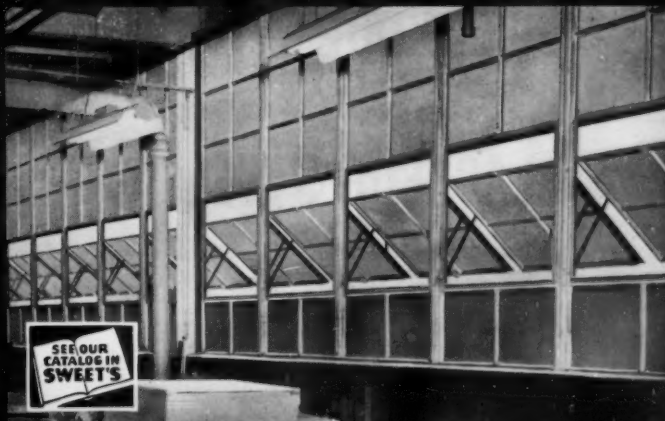
The bulb tee makes the strongest vertical sash bar.

The flat tee muntin totally replaces the steel pierced from the upright — making "Lok'd Bar" the strongest sash joint.

Corners solid-welded, each ventilator frame and casement reinforces the sash, withstands wind and shock for the life of the building.

Engineers like "Lok'd Bar's" extra safety in window walls. Builders find labor savings in installation. Look into Hope's "Lok'd Bar" sash for every good industrial building. Hope's Engineering Department will assist you with detail of window design and installation. Ask for this help!

Projected ventilator, balanced on strong steel arms with brass guides held in true position. (Pivoted ventilators are balanced on solid bronze cup pivots.)



"Lok'd Bar" means the world's finest factory sash. Ask for Catalog 103L

HOPE'S WINDOWS, INC., Jamestown, N. Y.

The Finest Buildings throughout the World are Fitted with Hope's Windows

Lumber—*West Coast Lumbermen's Association, 1410 S. W. Morrison St., Portland 5, Oreg.* 1954 "Where to Buy" directory of association members gives details needed by lumber purchaser in selecting mills able to furnish needed lumber. Information on capacities, equipment and special facilities, species and lumber items manufactured augment data on names of officials and addresses.

Metal Studs—*Metal Lath Manufacturers Assn., Engineers Bldg., Cleveland 14.* Factory-fabricated metal studs and how they are used in construction of non-load bearing hollow partitions is subject of Technical Bulletin 7. Charts and tables show fire and sound insulation tests and size and spacing of studs. Details and sample specifications are given and step-by-step photos show erection.



Kroger supermarket in Glendale, Missouri. Architect: Cay Weinel, St. Louis, Missouri. Contractor: White Development Corporation, St. Louis, Missouri.

EASY DOES IT

... with lightweight, versatile

LACLEDE STEEL JOISTS

Fast placing and erection . . . combined with modern design and strength make Laclede Steel Joists the answer to today's needs in roof construction.

Specify these LACLEDE Products:

Multi-Rib Reinforcing Bars • Steel Pipe • Welded Wire Fabric
Form and Tie Wire • Spirals • Conduit • Corrugated Steel Centering



LACLEDE STEEL COMPANY

St. Louis, Mo.

Plans have been announced to use the products of atomic energy in research work at CATERPILLAR TRACTOR Co. Radioactive materials will be used to accelerate long-time endurance tests on parts and are expected to give test results not obtainable by more conventional methods. Tests will be conducted by W. P. Evans of Caterpillar Research Department who studied handling and use of radioactive materials at the Institute of Nuclear Study, Oak Ridge, Tenn.

R. F. Allen has been appointed assistant to the executive vice president of H. K. PORTER Co.

Keith J. Evans, for many years advertising and sales promotion manager of JOSEPH T. RYERSON & SON, INC., has been appointed director of marketing and public relations. Lowell M. Bennett, formerly in charge of sales promotion, has been appointed advertising and sales promotion manager.

Chester J. Tucker has been appointed field service manager and William E. Woodley, Gale H. Stokes and Cecil L. Starner field service representatives of the CONSTRUCTION MACHINERY DIVISION OF CLARK EQUIPMENT Co. . . . Clark is building a 145,000 sq. ft. plant on the outskirts of Benton Harbor, Mich. It will be the assembly plant for the new line of "Michigan" tractor shovels and "Michigan" power shovels.

J. E. Heuser, Engine Division sales manager of LE ROI Co., has been elected president of the Internal Combustion Engine Institute.

KSM PRODUCTS, INC., has named H. L. Wagener as special consultant to its technical research group to guide in developing new materials and processes in stud welding.

J. Joseph Kelleher has been appointed sales manager of the Explosives Department of HERCULES POWDER Co.

A. J. Belanger has been appointed sales manager of PIONEER ENGINEERING WORKS, INC.

FAIRFIELD ENGINEERING Co. announces the appointment of William H. McEnally as sales manager of the Standard Products Division.

STANDARD FORMS

COVERING IMPORTANT CONTRACTING PROCEDURE



Prepared by The Associated General Contractors of America and Cooperating Bodies

Order No.	MANUALS	Per Copy	Per Dozen	Per 100
1.	A.G.C. Manual (Contains documents listed below: Nos. 3-30, inclusive, and Nos. 34, 35, 36, 36a, 37, 38).	\$5.00	\$50.00	—
2.	Accident Prevention Manual (Revised and enlarged 1952) (Pocket-sized sectional reprints available. Information on request.)	3.00	30.00	\$210.00

CONTRACTS

3.	Suggested Form of Contract, Engineering Construction Projects, prepared by A.S.C.E. and A.G.C., 1953 edition .....	.25	2.75	20.00
4.	Standard Building Contract of the American Institute of Architects—Revised 6th Edition .....	.50		47.50
5.	Subcontract form—American Institute of Architects—Revised 6th Edition .....	.10		9.50
6.	Standard Form of Acceptance of Subcontractor's Proposal .....	.10		9.50
7.	Standard Government Contract .....	.01		
8.	A.G.C. Cost Plus a Fee Contract .....	.10	.50	2.50
9.	A.I.A. Cost Plus a Fee Agreement between Contractor and Owner—Revised 6th Edition .....	.10		
11.	Equipment Rental Agreement .....	.10	.50	3.00
12.	A.G.C. Proposal Form .....	.10	.50	3.00

ESTIMATING AND ACCOUNTING

13.	A.I.A. Accounting Form #701 "Change Order" .....	.20	1.80	12.00
14.	A.I.A. Accounting Form #702 "Request for Partial Payment" .....	.20	1.80	12.00
15.	A.I.A. Accounting Form #703 "Certificate for Payment" .....	.20	1.80	12.00
16.	Building Estimate Summary .....	.10	.50	3.00
17.	Job Overhead Summary .....	.10	.50	3.00
20.	Contractors' Equipment Ownership Expense (Itemized tables of ownership expense elements with instructions for application. Revised 1949)	1.00	10.00	65.00
21.	Equipment Record—Bond paper .....	.10	.50	3.00
22.	Equipment Record—Cardboard .....	.10	.50	3.50

INVESTIGATION OF BIDDERS

24.	Standard Pre-Qualification Questionnaires and Financial Statements for Prospective Bidders—Complete in Cover. Engineering Construction (For Qualifying Before Bidding)20	1.80	12.00
-----	--	-----	------	-------

Order No.	INVESTIGATION OF BIDDERS (Continued)	Per Copy	Per Dozen	Per 100
25.	Standard Pre-Qualification Questionnaires and Financial Statements for Prospective Bidders—Complete in Cover. Building Construction (For Qualifying Before Bidding)	\$.20	\$1.80	\$12.00
26.	Standard Questionnaires and Financial Statement for Bidders—Complete in Cover. Engineering Construction (For Qualifying After Bidding) .....	.20	1.80	12.00
27.	Standard Questionnaires and Financial Statement for Bidders—Complete in Cover. Building Construction (For Qualifying After Bidding) .....	.20	1.80	12.00
28.	Financial Statement and Questionnaire for Credit Transactions .....	.20	1.80	12.00

MISCELLANEOUS

29.	Insurance Check List .....	.10	1.00	5.00
30.	The Functions of a General Contractor .....	.10	.75	6.00
34.	A.G.C. Governing Provisions .....	.10	.50	3.00
35.	A.G.C. Code of Ethical Conduct .....	.10	.50	5.00
36.	Concrete Mixer Standards			Single copies—no charge; quantity prices on application.
36a.	Contractors' Pump Standards			
37.	A.I.A. Standard Form of Arbitration Procedure			
38.	Suggested Guide to Bidding Procedure			



FOR A.G.C. MEMBERS ONLY

A.G.C. EMBLEM

List of Styles and Prices on request.

SIGNS AND SEALS

39.	A.G.C. Cardboard Seal (red and black) 24" dia. ....	.50
40.	A.G.C. Metal Seal (red and black) 10" dia. ....	.40
41.	A.G.C. Decalcomania Seal (red and black) a. 10" dia. ....	.20
	b. 5" dia. ....	.10
	Metal Seals and Decals: 20% discount for orders of more than 50; 40% discount for orders of 200 or more.	

43. A.G.C. SOCIAL SECURITY FORMS

Form SS1: Application for Employment; Form SS2: Employees' History Record; Form SS3: Employees' Employment and Earnings; Form SS4: Payroll. List of prices and styles will be furnished to A.G.C. members on request.

USE THE CONVENIENT COUPON TO PLACE YOUR ORDER

Order No.	Amount	Cost	11.	12.	13.	14.	15.	16.	17.	20.	21.	22.	24.	25.	26.	27.	28.	29.	30.	34.	35.	36.	36a.	37.	38.	39.	40.	41a.	41b.	43. Price List and Samples	Price List and Styles of Emblem	TOTAL COST
1.																																
2.																																
3.																																
4.																																
5.																																
6.																																
7.																																
8.																																
9.																																

Make Checks payable to CONSTRUCTION FOUNDATION, A.G.C., Munsey Building, Washington 4, D. C.

Gentlemen: Enclosed find check for \$_____ for which please send materials as ordered by number herewith.

Name _____ Address _____

City _____ Zone _____ State _____

Apr. 1954

**THESE
PEOPLE**

**ATTACH
THIS
PLATE**

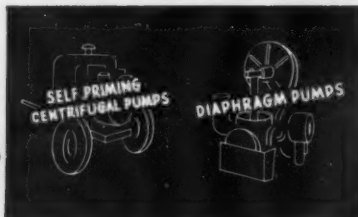
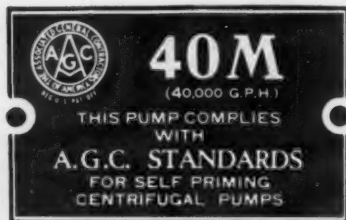
TO

**YOUR
INSURANCE
AGAINST**

**AND
YOUR
GUARANTY
OF**

**BARNES
MANUFACTURING CO.**
Mansfield, Ohio
**C. H. & E.
MANUFACTURING CO.**
Milwaukee 12, Wisc.
CARVER PUMP CO.
Muscatine, Iowa
CHAIN BELT CO.
Milwaukee 1, Wisconsin
**CONSTRUCTION
MACHINERY CO.**
Waterloo, Iowa
**ESSICK
MANUFACTURING CO.**
Los Angeles, Calif.
**THE GORMAN-RUPP
COMPANY**
Mansfield, Ohio
**THE JAEGER
MACHINE COMPANY**
Columbus, Ohio

**LEYMAN
MANUFACTURING
COMPANY**
Cincinnati 2, Ohio
MARLOW PUMPS
Ridgewood, New Jersey
**FOOD MACHINERY
& CHEMICAL CORP.**
Peerless Pump Division
Los Angeles 31, Calif.
**RICE PUMP &
MACHINE COMPANY**
Belgium, Wisconsin
**STERLING MACHINERY
COMPANY**
Los Angeles, Calif.
**WORTHINGTON
CORPORATION**
Concrete Machinery
Division
Plainfield, New Jersey



- **EXTRAVAGANT
CLAIMS**
- **INADEQUATE
POWER**
- **EXCESSIVE
MAINTENANCE**

- **RATED
PERFORMANCE**
- **QUALITY
CONSTRUCTION**
- **LONG LIFE
SERVICE**

CONTRACTORS PUMP BUREAU

(Established 1938) Affiliated with
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, INC.
Munsey Building, Washington 4, D. C.



ADVERTISERS' PRODUCTS

Manufacturers' addresses are listed on page 130

Airplanes
Aero Design and Engineering Co.

Asphalt Joint Sealer
Servicised Products Corp.

Asphalt Plants (Portable)
Barber-Greene Co.
Iowa Mfg. Co.

Awnings (Aluminum)
Kawneer Co.

Axles (Truck)
Eaton Manufacturing Co.

Backfillers
Bucyrus-Erie Co.
Cleveland Trencher Co.
Harnischfeger Corp.
Parsons Co.
Unit Crane and Shovel Corp.

Batchers
Blaw-Knox Division
Butler Bin Co.
Construction Machinery Co.
Heltzel Steel Form & Iron Co.
C. S. Johnson Co.

Bearings (Anti-Friction, Tapered Roller)
Hyatt Bearings Division
Timken Roller Bearing Co.

Belting
Carlyle Rubber Co.

Bins
Blaw-Knox Division
L. Burmeister Co.
Butler Bin Co.
Heltzel Steel Form & Iron Co.
Iowa Mfg. Co.
C. S. Johnson Co.

Bits (Detachable Drill)
Ingersoll-Rand Co.
Joy Manufacturing Co.
Timken Roller Bearing Co.

Blades (Grader, Maintainer, Snow Plow, Bulldozer, Scarifier)
Shunk Manufacturing Co.

Blasting Accessories
American Cyanamid Co.

Bridges
American Bridge Division
Armco Drainage & Metal Products

Buckets (Clamshell & Dragline)
Blaw-Knox Division
Bucyrus-Erie Co.
Harnischfeger Corp.
C. S. Johnson Co.
Owen Bucket Co.
Wellman Engineering Co.

Buckets (Concrete)
Blaw-Knox Division
Construction Machinery Co.
Heltzel Steel Form & Iron Co.
Insley Manufacturing Corp.

Owen Bucket Co.

Buildings
Allied Structural Steel Cos.
American Bridge Division
Armco Drainage & Metal Products
Luria Engineering Co.
Macomber, Inc.
Truscon Steel Division

Bulldozers
LeTourneau-Westinghouse Co.

Car Pullers
Clyde Iron Works
Superior-Lidgerwood-Mundy Corp.

Cement (Common and Special)
Lehigh Portland Cement Co.
Lone Star Cement Corp.
Universal Atlas Cement Co.

Cement (White)
Trinity White, General Portland Cement Co.
Universal Atlas Cement Co.

Clamps (Hose)
Dixon Valve & Coupling Co.

Compressors
Allis-Chalmers Co.
Ingersoll-Rand Co.
Joy Manufacturing Co.
LeRoi Co.

Concrete Mixers, Pavers, Tamers
Chain Belt Co.
Construction Machinery Co.
Foote Construction Equipment Division
Jaeger Machine Co.
Knickerbocker Co.
Koehring Co.
Kwik-Mix Co.
T. L. Smith Co.
Worthington Corp., Construction Equipment Division

Concrete Slab Void Tubes
Sonoco Products Co.

Concrete Vibrators
Concrete Surfacing Machinery Co.
Electric Tamper & Equipment Co.
Ingersoll-Rand Co.

Conveying Machinery
Barber-Greene Co.
Chain Belt Co.
Iowa Mfg. Co.
Joy Manufacturing Co.

Cranes
Austin-Western Co.
Bucyrus-Erie Co.
Clark Equipment Co., Construction Machinery Division
Cleveland Trencher Co.
Clyde Iron Works
Harnischfeger Corp.

- | | | | |
|---|--|--|---|
| <p>Insley Manufacturing Corp.
 Koehring Co.
 Manitowoc Engineering Corp.
 Northwest Engineering Co.
 Thew Shovel Co.
 Unit Crane and Shovel Corp.</p> <p>Crushing Machinery
 Allis-Chalmers Co.
 Austin-Western Co.
 Iowa Mfg. Co.</p> <p>Culverts
 Albert Pipe Supply Co.
 Armco Drainage & Metal Products</p> <p>Cutters (Abrasive)
 Wodack Electric Tool Corp.</p> <p>Decking (Roof Steel & Aluminum)
 Macomber, Inc.</p> <p>Derricks
 Clyde Iron Works</p> <p>Doors (Metal, Wood)
 Ceco Steel Products Corp.</p> | <p>Kawneer Co.
 Kinnear Mfg. Co.
 R. C. Mahon Co.
 Truscon Steel Division</p> <p>Dredging Machinery
 Harnischfeger Corp.
 Northwest Engineering Co.</p> <p>Drills & Drilling Machinery
 Bucyrus-Erie Co.
 Ingersoll-Rand Co.
 Joy Manufacturing Co.
 Salem Tool Co.
 Timken Roller Bearing Co.</p> <p>Drills (Electric)
 Wodack Electric Tool Corp.</p> <p>Electric Plants
 Kohler Co.</p> <p>Elevators (Material)
 Chain Belt Co.
 Iowa Mfg. Co.</p> <p>Engines
 Allis-Chalmers Tractor Div.
 American Hoist & Derrick Co.</p> | <p>Caterpillar Tractor Co.
 Continental Motors Corp.
 Detroit Diesel Engine Division
 Harnischfeger Corp.
 Ingersoll-Rand Co.
 International Harvester Co.
 Kohler Co.
 LeRoi Co.
 Reo Motors, Inc.
 Waukesha Motor Co.
 Wisconsin Motor Corp.</p> <p>Expansion Joints
 Laclede Steel Co.
 Servicised Products Corp.</p> <p>Explosives
 American Cyanamid Co.</p> <p>Facing (Aluminum)
 Kawneer Co.</p> <p>Financing
 C.I.T. Corp.</p> <p>Finishing Machines (Bituminous)
 Barber-Greene Co.</p> | <p>Finishing Machines (Concrete)
 Blaw-Knox Division</p> <p>Flooring
 Truscon Steel Division</p> <p>Forms (Concrete) and Accessories
 Blaw-Knox Division
 Economy Forms Corp.
 Heltzel Steel Form & Iron Co.
 Joseph T. Ryerson & Son, Inc.
 Sonoco Products Co.
 Symons Clamp & Mfg. Co.
 Universal Form Clamp Co.
 Walton Plywood Co.</p> <p>Generating Sets (Electric)
 Caterpillar Tractor Co.</p> <p>Graders
 J. D. Adams Mfg. Co.
 Allis-Chalmers Tractor Div.
 Austin-Western Co.
 Caterpillar Tractor Co.
 Euclid Division
 Galion Iron Works & Mfg. Co.
 Koehring Co.</p> |
|---|--|--|---|

CMC BIN BATCHERS AND JOB MIXERS MAKE AN UNBEATABLE COMBINATION

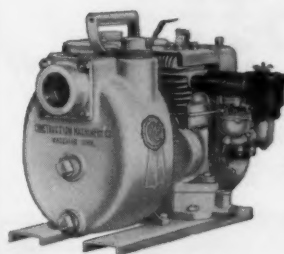


CMC Bin Batcher and 16S Mixers in Action

Whether charging an individual CMC 11S or 16S mixer or pair as shown above, a CMC Bin Batcher is the short cut to bigger profits.

Two or three compartment bins with a wide chain of travelling weighers and optional equipment. Matching bulk cement bins if desired.

CMC DUAL PRIME PUMPS ARE LIGHTER WEIGHT YET LONGER LIVED

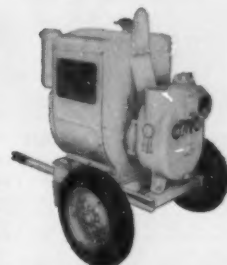


4M — 4000 G.P.H.

ALL SIZES

Built in all pipe sizes 1½" through 4". Other CMC Dual Primers in 6", 8" and 10" sizes with capacities to 240,000 G.P.H. Larger pumps have water cooled engines — gasoline or diesel. Also full line of electric pumps and pumps for belt drive.

New dual volute design makes priming rapid, automatic and dependable. Unpacked shaft seal is protected by rapidly spinning liquid screen. Fewer parts — easier to service.



40M — 40,000 G.P.H.

SOLD & SERVICED BY AMERICA'S BEST DISTRIBUTORS

CONSTRUCTION MACHINERY COMPANIES WATERLOO, IOWA

ADVERTISERS' PRODUCTS

Gravel Plants (Portable)

Iowa Mfg. Co.

Grinders (Electric)

Wodack Electric Tool Corp.

Hammers (Electric)

Wodack Electric Tool Corp.

Hoists

American Hoist & Derrick Co.
Clyde Iron Works
Construction Machinery Co.
Harnischfeger Corp.
Ingersoll-Rand Co.
Joy Manufacturing Co.
Superior-Lidgerwood-Mundy Corp.

Hose (Air, Water, Steam, Suction)

Carlyle Rubber Co.

Industrial Financing

C.I.T. Corp.

Insurance (Automobile, Casualty, Compensation, Liability)

Aetna Casualty & Surety Co.
American Casualty Co.
Central Surety & Insurance Corp.
Employers Mutuals of Wausau

Joists (Steel)

Ceco Steel Products Corp.
Laclede Steel Co.
Macomber, Inc.

Lighting Plants

LeROI Co.

Loaders (Portable)

J. D. Adams Mfg. Co.
Barber-Greene Co.

Lubricants

Gulf Oil Corp.

Menders (Hose)

Dixon Valve & Coupling Co.
Ingersoll-Rand Co.

Mixers (Truck)

Blaw-Knox Division
Chain Belt Co.

Mixing Plants

Blaw-Knox Division
L. Burmeister Co.
Butler Bin Co.
Chain Belt Co.
C. S. Johnson Co.

Mortar (Masonry)

Lehigh Portland Cement Co.

Nipples (Hose)

Dixon Valve & Coupling Co.

Pan Forms (Concrete)

Gateway Erectors, Inc.

Partitions (Steel, Load-Bearing)

Macomber, Inc.

Pile Drivers

American Hoist & Derrick Co.
Austin-Western Co.
Bucyrus-Erie Co.
Harnischfeger Corp.
Ingersoll-Rand Co.
Joy Manufacturing Co.
McKiernan-Terry Corp.
Northwest Engineering Co.
Thew Shovel Co.
Vulcan Iron Works

Piling (Steel)

Albert Pipe Supply Co.
Allied Structural Steel Cos.
American Bridge Division
Armco Drainage & Metal Products
Bethlehem Steel Co.
L. B. Foster Co.
Union Metal Manufacturing Co.

Pipe

Albert Pipe Supply Co.
Armco Drainage & Metal Products
L. B. Foster Co.
Laclede Steel Co.
Naylor Pipe Co.
Universal Concrete Pipe Co.
Universal Sewer Pipe Corp.

Plywood

Walton Plywood Co.

Pumps (Contractors')

Barnes Mfg. Co.
C.H.&E. Mfg. Co.
Carver Pump Co.
Chain Belt Co.
Construction Machinery Co.
Essick Manufacturing Co.
Gorman-Rupp Co.
Griffin Wellpoint Corp.
Ingersoll-Rand Co.
Jaeger Machine Co.
Leyman Mfg. Corp.
Marlow Pumps
Novo Engine Co.
Peerless Pump Division
Rice Pump & Machine Co.
Sterling Machinery Corp.
Worthington Corp., Construction Equipment Division

Pumps (Jetting)

Gorman-Rupp Co.
Griffin Wellpoint Corp.

Quantity Surveyors

H. A. Sloane Associates

Quarry Plants

Austin-Western Co.
Iowa Mfg. Co.

Rail

L. B. Foster Co.

Railway Equipment & Track Material

L. B. Foster Co.
Wisconsin Motor Corp.

Reinforcement Accessories

Economy Forms Corp.
Symons Clamp & Mfg. Co.
Universal Form Clamp Co.

Reinforcing Steel and Mesh

American Bridge Division
Bethlehem Steel Co.
Ceco Steel Products Corp.
Connors Steel Division
Laclede Steel Co.
Joseph T. Ryerson & Son, Inc.
Truscon Steel Division

Rollers

Austin-Western Co.
Blaw-Knox Division
Euclid Division
Galion Iron Works & Mfg. Co.

Roof Deck (Steel)

Allied Structural Steel Cos.
Ceco Steel Products Corp.
R. C. Mahon Co.
Truscon Steel Division

Rope (Wire)

American Hoist & Derrick Co.
L. B. Foster Co.
Joseph T. Ryerson & Son, Inc.

Sash (Metal, Wood)

William Bayley Co.
Hope's Windows, Inc.
Truscon Steel Division

Scaffolding (Sectional Steel, Tubular Steel)

Patent Scaffolding Co.

Scarifiers

J. D. Adams Mfg. Co.
Austin-Western Co.

Scrapers

Austin-Western Co.
Caterpillar Tractor Co.
Euclid Division
Galion Iron Works & Mfg. Co.
LeTourneau-Westinghouse Co.

Screens (Sand, Gravel & Coal)

Iowa Mfg. Co.

Shores

Patent Scaffolding Co.
Symons Clamp & Mfg. Co.

Shovels (Power)

American Hoist & Derrick Co.
Austin-Western Co.
Bucyrus-Erie Co.
Butler Bin Co.
Clark Equipment Co., Construction Machinery Division
Harnischfeger Corp.
Insley Manufacturing Corp.

Dependable Hammers for Contractors



WODACK "Do-All"®
Combination Electric
Hammer and Drill

For drilling and chipping concrete and masonry, the Wodack "Do-All" is the first choice of thousands of contractors. They try it, like and buy more.

Given extra service, as a drill as well as a hammer. Change made in less than a minute. Drills $\frac{1}{2}$ " in steel, $\frac{3}{4}$ " in wood. Quick factory service on accessories, parts and repairs. Most repairs can be made by owner.

Accessories: Star drills in 20 diameters $\frac{1}{8}$ " to $1\frac{1}{2}$ " and drilling

depths to 24". Chisels, points and many other hammer tools. Attachments for grinding, buffing and right angle drilling. Drill stand and grinding stand.

Ask for full information in Bulletin 510-C. No obligation—no salesmen. Sold direct to contractors.

Wodack® Electric Tool Corp.
4629 W. Huron St., Chicago 44, Ill.
AUSTIN 7-9866

Contract Bonds

A sound understanding of
the problems of the qualified
contractor who requires
surety credit

American Casualty Company
READING, PENNSYLVANIA

ADVERTISERS' PRODUCTS

- | | |
|--|--|
| Koehring Co.
Manitowoc Engineering Corp.
Northwest Engineering Co.
Thew Shovel Co.
Unit Crane and Shovel Corp. | International Harvester Co.
M-R-S Manufacturing Co. |
| Shutters (Fire, Labeled)
Kinnear Mfg. Co.
R. C. Mahon Co. | Trailers (Dump & Crawler Wheel)
Euclid Division
LeTourneau-Westinghouse Co. |
| Slings (Wire Rope)
American Hoist & Derrick Co. | Trailers (Heavy Equipment)
Rogers Bros. Corp. |
| Slipform Equipment
B. M. Heede, Inc. | Transmissions
Cotta Transmission Co. |
| Spreaders (Bituminous Surface)
Galion Iron Works & Mfg. Co. | Tranchers
Barber-Greene Co.
Clark Equipment Co., Construction Machinery Division
Cleveland Trencher Co.
Harnischfeger Corp.
Parsons Co.
Unit Crane and Shovel Corp. |
| Stabilizing Equipment
Harnischfeger Corp.
Iowa Mfg. Co. | Trestles (Adjustable Steel)
Patent Scaffolding Co. |
| Steel (Structural)
Allied Structural Steel Cos.
American Bridge Division
Bethlehem Steel Co.
Flint Steel Corp.
Macomber, Inc.
Joseph T. Ryerson & Son, Inc.
Truscon Steel Division | Truck Axles
Eaton Manufacturing Co. |
| Store Fronts
Kawneer Co. | Trucks (Heavy Rear-Dump)
Euclid Division |
| Stud Welding
KSM Products, Inc. | Trucks (Motor)
International Harvester Co. |
| Surety Bonds
Aetna Casualty & Surety Co.
American Casualty Co.
American Surety Co.
Central Surety & Insurance Corp.
Employers Mutuals of Wausau
Fidelity & Deposit Co.
Fire Association of Philadelphia
Insurance Co. of North America
National Surety Corp. | Trusses (Steel)
Macomber, Inc. |
| Surveying Instruments
Fennel Instrument Corp. | Tunnel Liner Plates
Armco Drainage & Metal Products |
| Swing Stages
Patent Scaffolding Co. | Used Equipment
Bianchi, Central, Munroe-Langstroth, Rugo. |
| Tires
Goodyear Tire & Rubber Co. | Valves (Air-Self-Honing)
Dixon Valve & Coupling Co. |
| Tools (Pneumatic, Electric)
Allis-Chalmers Co.
Ingersoll-Rand Co.
Joy Manufacturing Co. | Wagons (Dump)
Austin-Western Co.
Caterpillar Tractor Co.
Euclid Division
LeTourneau-Westinghouse Co. |
| Tractors
Allis-Chalmers Tractor Div.
Caterpillar Tractor Co. | Walls
R. C. Mahon Co. |
| | Washing Plants
Austin-Western Co.
Iowa Mfg. Co. |
| | Wellpoint Systems
Griffin Wellpoint Corp. |
| | Winches
Clyde Iron Works
Superior-Lidgerwood-Mundy Corp. |



Taking chances on highways and streets costs America 2,092,000 casualties annually.

It doesn't pay to take chances when buying a mixer either!



Be sure the Mixer you buy is AGC RATED!



● You know just what the performance of a Mixer will be when it's AGC RATED!

For to wear the AGC plate, portable concrete Mixers and Pavers must meet rigid specifications as to sizes and mixing capacity.

Mixer Manufacturers Bureau

Affiliated with the Associated General Contractors of America, Inc.



CHAIN BELT COMPANY
Milwaukee, Wisconsin
CONSTRUCTION MACHINERY CO.
Waterloo, Iowa
BLAW-KNOX COMPANY
Foote Construction Equipment Division
Nunda, New York
THE JAEGER MACHINE CO.
Columbus, Ohio

THE KNICKERBOCKER CO.
Jackson, Michigan
KOEHRING COMPANY
Milwaukee, Wisconsin
KWIK-MIX COMPANY
Port Washington, Wisconsin
THE T. L. SMITH COMPANY
Milwaukee, Wisconsin

WORTHINGTON CORPORATION
Concrete Machinery Division
Plainfield, New Jersey

MANUFACTURERS LISTED IN GUIDE

J. D. Adams Mfg. Co.
Indianapolis 6, Ind.

Aero Design and Engineering Co.
Tulakes Airport
Oklahoma City, Okla.

Aetna Casualty & Surety Co.
Hartford 15, Conn.

Albert Pipe Supply Co.
Berry & N. 13th St
Brooklyn 11, N. Y.

Allied Structural Steel Cos.
20 N. Wacker Drive
Chicago 6, Ill.

Allis-Chalmers Co.
Milwaukee 1, Wis.

**American Bridge Division—
U. S. Steel Co.**
525 William Penn Place
Pittsburgh, Pa.

American Casualty Co.
Reading, Pa.

American Cyanamid Co.
30 Rockefeller Plaza
New York 20, N. Y.

American Hoist & Derrick Co.
St. Paul 1, Minn.

American Surety Co.
100 Broadway
New York 5, N. Y.

**Armo Drainage & Metal
Products, Inc.**
2280 Curtis St.
Middletown, Ohio

Austin-Western Co.
Aurora, Ill.

Barber-Greene Co.
Aurora, Ill.

Barnes Mfg. Co.
605 N. Main St.
Mansfield, Ohio

William Bayley Co.
Springfield, Ohio

Bethlehem Steel Co.
Bethlehem, Pa.

**Bianchi, Central, Munroe-Langstroth,
Rugo**
Downsville, N. Y.

Blaw-Knox Division
Pittsburgh 38, Pa.

Bucyrus-Erie Co.
South Milwaukee, Wis.

L. Burmeister Co.
4527 W. Mitchell St.
Milwaukee 14, Wis.

Butler Bin Co.
Waukesha, Wis.

C. H. & E. Mfg. Co.
3842 N. Palmer St.
Milwaukee 12, Wis.

C.I.T. Corp.
1 Park Ave.
New York 16, N. Y.

Carlyle Rubber Co.
62-64 Park Place
New York 7, N. Y.

Carver Pump Co.
Muscatine, Iowa

Caterpillar Tractor Co.
Peoria 8, Ill.

Ceco Steel Products Corp.
5601 W. 26th St.
Chicago 50, Ill.

**Central Surety and Insurance
Corp.**
1737 McGee St.
Kansas City 10, Mo.

Chain Belt Co.
4625 W. Greenfield Ave.
Milwaukee 1, Wis.

Clark Equipment Co.
Construction Machinery Division
483 Second St.
Benton Harbor, Mich.

Cleveland Trencher Co.
20100 St. Clair Ave.
Cleveland 17, Ohio

Clyde Iron Works
Duluth 1, Minn.

Concrete Surfacing Machinery Co.
Cincinnati 32, Ohio

Connors Steel Division
H. K. Porter Co.
P. O. Box 2562
Birmingham, Ala.

Construction Machinery Co.
Waterloo, Iowa

Continental Motors Corp.
Muskegon, Mich.

Cotta Transmission Co.
Rockford, Ill.

**Detroit Diesel Engine Division,
General Motors Corp.**
Detroit 28, Mich.

Dixon Valve & Coupling Co.
Columbia & Hancock Sts.
Philadelphia 22, Pa.

Eaton Manufacturing Co.
Axle Division
739 E. 140th St.
Cleveland 10, Ohio

Economy Forms Corp.
4301 E. 14th St.
Des Moines 13, Iowa

Electric Tapper & Equipment Co.
Ludington, Mich.

Employers Mutuals of Wausau
Wausau, Wis.

Essick Manufacturing Co.
1950 Santa Fe Ave.
Los Angeles, Calif.

Euclid Division
General Motors Corp.
Cleveland 17, Ohio

Fennel Instrument Corp. of America
478 Water St.
New York 2, N. Y.

Fidelity & Deposit Co.
Fidelity Bldg.
Baltimore 3, Md.

Fire Association of Philadelphia
401 Walnut St.
Philadelphia 6, Pa.

Flint Steel Corp.
P.O. Box 1289
Tulsa, Okla.

**Foots Construction Equipment
Division**
Blaw-Knox Co.
1908 State St.
Nunda, N. Y.

L. B. Foster Co.
Pittsburgh 30, Pa.

Galion Iron Works & Mfg. Co.
Galion, Ohio

Gateway Erectors, Inc.
3233 W. Grand Ave.
Chicago 51, Ill.

Goodyear Tire & Rubber Co.
Akron 16, Ohio

Gorman-Rupp Co.
Mansfield, Ohio

Griffin Wellpoint Corp.
881 E. 141st St.
New York 54, N. Y.

Gulf Oil Corp.
Gulf Building
Pittsburgh 30, Pa.

Harnischfeger Corp.
4400 W. National Ave.
Milwaukee 46, Wis.

B. M. Heede, Inc.
80 Broad St.
New York 4, N. Y.

Heltzel Steel Form & Iron Co.
Warren, Ohio

Hope's Windows, Inc.
Jamestown, N. Y.

Hyatt Bearings Division
General Motors Corp.
Harrison, N. J.

(Continued on page 132)

CONTRACTORS' RUBBER PRODUCTS

AIR HOSE	FIRE HOSE
WATER HOSE	OIL HOSE
SUCTION HOSE	HYDRAULIC
DISCHARGE	HOSE
HOSE	WELDING HOSE
STEAM HOSE	VACUUM HOSE

CONVEYOR BELTING
ELEVATOR BELTING
TRANSMISSION BELTING

CALL, WIRE or WRITE
CARLYLE
THE
RUBBER HEADQUARTERS

LOW PRICES
IMMEDIATE DELIVERY

SEND FOR NEW
1954 CATALOG

CARLYLE RUBBER CO., Inc.

62-64 PARK PLACE Dlgby 9-3810 NEW YORK 7, N. Y.

Efficient Operation and Maintenance of Construction Equipment

are explained in

AUTOMOTIVE AND CONSTRUCTION EQUIPMENT

By C. W. LINDGREN

Outlines economical and efficient practices in the use of trucks, loading equipment, shovels, cranes, tractors, scrapers, bulldozers, motor graders, rollers, trenching machines, paving equipment and sand and gravel equipment. Gives step-by-step explanations of the functions of these pieces of equipment. Contains valuable information on planning and cost estimating. 120 illustrative sketches.

A valuable reference book for owners of construction equipment.

Price \$4.50 Postpaid

THE CONSTRUCTOR
BOOK DEPARTMENT

MUNSEY BUILDING

WASHINGTON 4, D. C.

INDEX OF ADVERTISERS

A.G.C. Forms and Reports	125	Hope's Windows, Inc.	123
Allis-Chalmers Tractor Division	40, 41, 74	Agency—The Moss-Chase Co.	
Agency—Bert S. Gittins, Advertising		Hyatt Bearings Division, General Motors Corp.	28
American Bridge Division, U. S. Steel Corp.	79	Agency—D. P. Brothier & Co.	
Agency—Batten, Barton, Durstine & Osborn, Inc.		Indemnity Insurance Co. of North America	77
American Casualty Co.	128	Agency—N. W. Ayer & Son, Inc.	
Agency—Marshall and Kumler		International Harvester Co.	65, 66, 67, 68
Armco Drainage & Metal Products, Inc.	63	Agency—Leo Burnett Co.	
Agency—N. W. Ayer & Son, Inc.		Iowa Manufacturing Co.	85
Associated General Contractors of America, The	88	Agency—Russell T. Gray, Inc.	
Agency—Lewis Edwin Ryan		Jackson Vibrators, Inc.	83
Austin-Western Co.	Cover 2	Agency—Stevens, Inc.	
Agency—Merrill, McEnroe & Associates, Inc.		Kawneer Co.	101
Barber-Greene Co.	45	Agency—Fuller & Smith & Ross, Inc.	
Agency—The Buchen Co.		Kinnear Manufacturing Co., The	91
Bayley, William, Co., The	39	Agency—Wheeler-Kight and Gainey, Inc.	
Agency—Wheeler-Kight and Gainey, Inc.		Koehring Co.	48, 49
Bianchi, Central, Munroe-Langstroth, Rugo	70	Agency—Andrews Agency, Inc.	
Blaw-Knox Co., Blaw-Knox Equipment Division	132	Kohler Co.	76
Agency—Russell T. Gray, Inc.		Agency—Roche, Williams & Cleary, Inc.	
Bucyrus-Erie Co.	Cover 4	Laclede Steel Co.	124
Agency—Bert S. Gittins, Advertising		Agency—Batz-Hodgson-Neuwoehner Advertising Agency	
Butler Bin Co.	58	Lehigh Portland Cement Co.	20
Agency—Morrison-Greene-Seymour, Inc.		Agency—Geare-Marston	
C.I.T. Corp.	4	LeTourneau-Westinghouse Co.	14, 15, 92
Agency—Fuller & Smith & Ross, Inc.		Agency—Andrews Agency, Inc.	
Carlyle Rubber Co.	130	Lone Star Cement Corp.	2
Agency—Walter J. Bergman, Advertising		Agency—Cowan & Dengler, Inc.	
Caterpillar Tractor Co.	26, 27	Luria Engineering Co.	121
Agency—N. W. Ayer & Son, Inc.		Agency—Storm and Klein, Inc.	
Clark Equipment Co., Construction Machinery Division	98	M-R-S Manufacturing Co.	80, 81
Agency—Marsteller, Cebhardt and Reed, Inc.		Agency—Robert J. Peets Advertising	
Cleveland Trencher Co., The	115	Macomber, Inc.	12
Agency—Meermans, Inc.		Mahon, R. C., Co., The	24
Connors Steel Division, H. K. Porter Co.	57	Agency—Anderson, Inc.	
Agency—Robert Luckie & Co.		Mixer Manufacturers Bureau	129
Construction Machinery Cos.	127	Agency—Weston-Barnett, Inc.	
Agency—Weston-Barnett, Inc.		Northwest Engineering Co.	10
Continental Motors Corp.	73	Agency—Russell T. Gray, Inc.	
Agency—Cummings & Hopkins		Reo Motors, Inc.	100
Contractors Pump Bureau	126	Agency—William Hart Adler, Inc.	
Agency—Weston-Barnett, Inc.		Sloane, H. A., Associates	100
Cotta Transmission Co.	106	Agency—Posner-Zabin Advertising	
Agency—Howard H. Monk & Associates, Inc.		Sonoco Products Co.	107
Dixon Valve & Coupling Co.	84	Agency—Bennett-Advertising, Inc.	
Agency—George C. Taylor, Advertising		Superior Lidgerwood Mundy Corp.	106
Employers Mutuals of Wausau	18	Agency—Albert Frank-Guenther Law, Inc.	
Agency—J. Walter Thompson Co.		Symons Clamp and Mfg. Co.	8
Euclid Division, General Motors Corp.	52, 53	Agency—Marsteller, Cebhardt and Reed, Inc.	
Agency—Richard T. Brandt, Inc.		Thew Shovel Co., The	Cover 3
Fire Association of Philadelphia	116	Agency—Hosler Advertising, Inc.	
Agency—Lewis & Gilman, Inc.		Truscon Steel Division, Republic Steel Corp.	16
Flint Steel Corp.	90	Agency—Meldrum & Fewsmith, Inc.	
Agency—Watts, Payne—Advertising, Inc.		Union Metal Manufacturing Co., The	118
Foster, L. B., Co.	102	Agency—The Griswold-Eshleman Co.	
Agency—Lando Advertising Agency		Universal Atlas Cement Co.	94
Gateway Erectors, Inc.	72	Agency—Batten, Barton, Durstine & Osborn, Inc.	
Goodyear Tire & Rubber Co.	1	Universal Form Clamp Co.	71
Agency—Kudner Agency, Inc.		Agency—Ross Llewellyn, Inc.	
Gorman-Rupp Co., The	113	Universal Sewer Pipe Corp.	6
Agency—Coleman Todd & Associates		Agency—Baker and Baker & Associates, Inc.	
Griffin Wellpoint Corp.	56	Vulcan Iron Works	62
Agency—Posner-Zabin Advertising		Agency—The Biddle Co.	
Gulf Oil Corp.	108	Walton Plywood Co.	122
Agency—Young & Rubicam, Inc.		Wellman Engineering Co., The	105
Harnischfeger Corp.	22	Agency—The Griswold-Eshleman Co.	
Agency—The Buchen Co.		Wodack Electric Tool Corp.	128
Heltzel Steel Form & Iron Co., The	117		
Agency—McClure and Wilder, Inc.			

MANUFACTURERS LISTED IN GUIDE

(Continued from page 130)

Ingersoll-Rand Co.
11 Broadway
New York 4, N. Y.

Insley Manufacturing Co.
801 N. Olney St.
Indianapolis 6, Ind.

Insurance Co. of North America
1600 Arch St.
Philadelphia, Pa.

International Harvester Co.
180 N. Michigan Ave.
Chicago 1, Ill.

Iowa Mfg. Co.
Cedar Rapids, Iowa

Janger Machine Co.
528 Dublin Ave.
Columbus 16, Ohio

C. S. Johnson Co.
Champaign, Ill.

Joy Manufacturing Co.
Oliver Building
Pittsburgh 22, Pa.

KSM Products, Inc.
Stud Welding Division
Merchantville, N. J.

Kawneer Co.
1105 N. Grant St.
Niles, Mich.

Kinnear Mfg. Co.
650-680 Fields Ave.
Columbus 16, Ohio

Knickerbocker Co.
Jackson, Mich.

Koshring Co.
3026 W. Concordia Ave.
Milwaukee 16, Wis.

Kohler Co.
Kohler, Wis.

Kwik-Mix Co.
Port Washington, Wis.

Laclede Steel Co.
Arcade Bldg.
St. Louis 1, Mo.

Lehigh Portland Cement Co.
Allentown, Pa.

LeRoi Co.
1706 S. 68th St.
Milwaukee 14, Wis.

LeTourneau-Westinghouse Co.
Peoria 5, Ill.

Leyman Mfg. Corp.
Cincinnati 2, Ohio

Lone Star Cement Corp.
100 Park Ave.
New York 17, N. Y.

Luria Engineering Co.
500 Fifth Ave.
New York 36, N. Y.

M-R-S Manufacturing Co.
Flora, Miss.

Macomber, Inc.
Canton 1, Ohio

R. C. Mahon Co.
Detroit 34, Wis.

Manitowoc Engineering Corp.
Manitowoc, Wis.

Marlow Pumps
Ridgewood, N. J.

McKiernan-Terry Corp.
18 Park Row
New York 38, N. Y.

National Surety Corp.
4 Albany St.
New York, N. Y.

Naylor Pipe Co.
1280 E. 92d St.
Chicago 19, Ill.

Northwest Engineering Co.
Field Bldg., 135 S. LaSalle St.
Chicago 3, Ill.

Novo Engine Co.
212 Porter St.
Lansing 5, Mich.

Owen Bucket Co.
7750 Breakwater Ave.
Cleveland 2, Ohio

Parsons Co.
Newton, Iowa

Patent Scaffolding Co.
38-21 12th St.
Long Island City 1, N. Y.

Pearless Pump Division
Food Machinery and Chemical
Corp.
301 West Ave. 26
Los Angeles 31, Calif.

Reo Motors, Inc.
Lansing 20, Mich.

Rice Pump & Machine Co.
Grafton, Wis.

Rogers Bros. Corp.
223 Orchard St.
Albion, Pa.

Joseph T. Ryerson & Son, Inc.
P. O. Box 8000-A
Chicago 80, Ill.

Salem Tool Co.
Salem, Ohio

Servicised Products Corp.
6051 W. 65th St.
Chicago 38, Ill.

Shunk Manufacturing Co.
Bucyrus, Ohio

H. A. Sloane Associates
415 Lexington Ave.
New York 17, N. Y.

T. L. Smith Co.
2853 N. 32d St.
Milwaukee 10, Wis.

Senoco Products Co.
Hartsville, S. C.

Sterling Machinery Corp.
1950 Santa Fe Ave.
Los Angeles 21, Calif.

Superior-Lidgerwood-Mundy Corp.
Superior, Wis.

Symons Clamp & Mfg. Co.
4259 W. Diversey Ave.
Chicago 39, Ill.

Thew Shovel Co.
Lorain, Ohio

Timken Roller Bearing Co.
Canton 6, Ohio

**Trinity White, General Portland
Cement Co.**
111 W. Monroe St.
Chicago 3, Ill.

Truscon Steel Division
1100 Albert St.
Youngstown 1, Ohio

Union Metal Manufacturing Co.
Canton 5, Ohio

Unit Crane and Shovel Corp.
6307 W. Burnham St.
Milwaukee 14, Wis.

Universal Atlas Cement Co.
100 Park Ave.
New York 17, N. Y.

Universal Concrete Pipe Co.
297 S. High St.
Columbus, Ohio

Universal Form Clamp Co.
1238 N. Kostner
Chicago 51, Ill.

Universal Sewer Pipe Corp.
1500 Union Commerce Bldg.
Cleveland 14, Ohio

Vulcan Iron Works
329 North Bell Ave.
Chicago 12, Ill.

Walton Plywood Co.
644 E. 38th St.
Indianapolis 5, Ind.

Waukesha Motor Co.
Waukesha, Wis.

Wellman Engineering Co.
7015 Central Ave.
Cleveland 4, Ohio

Wisconsin Motor Corp.
Milwaukee 46, Wis.

Wodack Electric Tool Corp.
4627 W. Huron St.
Chicago 44, Ill.

**Worthington Corp.—Constr. Equip.
Div.**
Plainfield, N. J.

BLAW-KNOX

CONCRETE BUCKETS

**Speed
work
Cut concrete
placing costs**



WHETHER you're placing fluid or dry concrete, big aggregate or normal stone, any specification—there's a size and type of Blaw-Knox Concrete Bucket to suit your needs:

Blaw-Knox Roller Gate Controllable Discharge Concrete Buckets for normal or low slump concrete for general construction work.

Blaw-Knox CAC Concrete Buckets with air operated clam gates for low slump mass concrete specifications.

Also, Tremie type buckets for placing concrete under water.

See your nearest Blaw-Knox distributor for details.

BLAW-KNOX COMPANY
BLAW-KNOX EQUIPMENT DIVISION
Pittsburgh 38, Pa.

BLAW-KNOX

ADVERTISEMENT

Operator's Pride Key to Low Shovel Maintenance



by
R. G. THIBAUT
Service
Manager,
The Thew
Shovel Co.

The pride of the operator in his job and his machine is the real key to low shovel-crane maintenance cost. If the operator takes enough pride in his machine and his job to see that proper lubrication and servicing is done on a regular schedule, costly shut-downs and repairs can be avoided.

All manufacturers want their machines to get the best of care—want them to serve the contractor well and safely throughout a long and trouble-free life. To that end they publish operator's manuals with preventive maintenance, adjustment and lubrication instructions and proper operation procedures. However, no one but the operator, or the master mechanic, can see that these programs are carried out completely.

Easy-access grease fittings and simplified adjustments are provided to make this part of the operator's job easier. Permanent lifting capacities mounted in the cab make it easy to keep loads within safe limits. But, the operator himself is still the key to the problem, because he is the only one that can implement the planning that is done to assure trouble-free operation. If he really knows his machine, and maintains and services it as the factory recommends, and does not abuse it, operating and maintenance costs will be reduced to a minimum.

It is a standing joke that women do not read instructions on new equipment they buy such as washing machines, cleaners, etc. Service engineers can testify that some operators apparently never read their service manuals either—or if they do, they don't remember what they read—or don't care.

It all comes back to how much pride the operator has—in his job, in his machine, and in himself. That is what really gets the most out of a piece of equipment—at lowest operating cost.

DO YOU MAKE YOUR LIVING WITH CRANES?

Freeto Construction Co., Pittsburgh, Kansas, use Lorain Crane, model TL25-KS with pile driver and drop hammer on a 50 ft. boom to drive 20 ft. steel piles on bridge construction.



You know then that a good, profit-making crane is more than a crane boom and hook block, but a well-balanced tool, with proper equipment to fit your job needs. The Lorain TL-25 crane—in the $\frac{3}{4}$ yd. class—does just that. Here are a few of the features you get as standard or available equipment.

Power Load Lowering at variable engine speeds, enables loads to be backed down, under power and clutch control, for accurate and safe placement.

Precision Boom Hoist is a "must" for steel erection. Provides continuous engagement between engine and derricking mechanism to give any degree of power-controlled boom lowering speed and precision desired.

Third Drum* permits a third line for "snaking" material in close to the machine or the operation of a whip line along with both regular hoist lines. Particularly useful when using crane as pile driver.

All Welded Boom—boom stops—swing brake.

Choice of 3 Crawlers in general purpose, extra long and extra long-extra wide sizes. The latter is 12' 6" long by 11' 8" wide and because of its maximum stability and ground bearing area is ideally suited for crane, dragline, clamshell and soft-ground operations. 29" wide tread shoes also available.

Complete Convertibility, dragline, clamshell, hoe or shovel.

*Extra Equipment

THE THEW SHOVEL CO., LORAIN, OHIO

TL 25



ON RUBBER TIRES

If your crane operation requires maximum travel speed and mobility, you can get all the advantages of "TL-25" turntable performance in a Lorain rubber-tire mounting. 30 MPH 2-engine Moto-Cranes and 7 MPH single-engine Self-Propelled models, each available in 2 lifting capacities.

THEW LORAIN®

SHOVELS • CRANES • DRAGLINES • CLAMSHELLS • HOES

Individual DESIGN In Excavators

PAYS OFF IN OUTPUT

Big full dippers on every pass, fast smooth swing, clean dump, and quick return to digging position — that's the kind of operation you depend upon to hold down costs on highway jobs and to meet deadlines.

Bucyrus-Erie excavators give you the kind of performance that keeps your hauling units busy moving big daily yardages. Because there's *individual design for every model in the Bucyrus-Erie line*, the power, speed, and weight of each unit is exactly proportioned for peak operating efficiency in handling its rated load.

Look what it means when front end, main machinery, power unit, and mounting are all perfectly matched to dipper capacity:

NO POWER BOTTLENECKS to prevent getting full payloads every time.

NO EXCESS WEIGHT to slow down speed of swing.

NO EXCESSIVE LOADS on brakes, clutches and other machinery to hinder smooth blending of operating functions.

There are many other benefits resulting from Bucyrus-Erie *individual design*. For the full story, see your local Bucyrus-Erie excavator distributor.

10E54C

**BUCYRUS
ERIE**

BUCYRUS-ERIE COMPANY
SOUTH MILWAUKEE, WISCONSIN

$\frac{3}{4}$ - to 4-yard Gasoline, Diesel, Single-Motor Electric Excavators